

Version 3 - November 2008



**DEPARTMENT OF THE ARMY**

**POLICY GUIDANCE**

**FOR IMPLEMENTATION OF AN**

**ENERGY SAVINGS PERFORMANCE CONTRACT**

**November 2008**

Page intentionally blank

## FOREWORD

In response to an internal Army Audit Agency (AAA) report (A-2004-0068-FPP, dated 10 December 2003), the Army undertook a review of its use of Energy Savings Performance Contracting (ESPC) program. The purpose of the review was to strengthen policies and streamline execution to improve the overall ESPC program. The results of that review culminated in the development of this policy guidance.

The Army requires substantial contractor investment to meet energy reduction goals of the P.L. 109-58, *Energy Policy Act of 2005* and Executive Order 13423, *Strengthening Federal Environmental, Energy and Transportation Management*, and P.L. 110-140, the *Energy Independence and Security Act of 2007*.

ESPCs are one of the tools that Army facility managers can use to solve facility problems and reduce energy consumption with minimal up-front cost. Applied with care and consideration, ESPCs can help facility managers:

- a. Save energy and reduce costs
- b. Help meet environmental requirements
- c. Reduce equipment breakdowns and emergency repair requests
- d. Provide better, more productive living and working conditions
- e. Enhance energy security.

Use of ESPCs requires that the initiative save energy as stipulated by 42 US Code, Chapter 91, Subchapter VII, Section 8287. The Office of the Assistant Chief of Staff for Installation Management (OACSIM) developed a Process Improvement Plan (PIP) to review all aspects of the ESPC process. ESPC is a partnership between an Energy Services Company (ESCO), an Installation, and a contracting agency. To better understand the issues of each partner, the OACSIM conducted meetings with each partner separately, identified key issues and concerns, documented successes, and areas for improvement. A Process Action Team was formed with members of the OACSIM, Headquarters Installation Management Command (HQ IMCOM), Headquarters, U.S. Army Corps of Engineers (HQUSACE), and ESPC partners to review the information gathered and to prepare guidance and information for the Installations.

This document provides the guidance developed as a result of the PIP and AAA recommendations from audits of ESPC projects. Comments relating to this document are always welcome. The form to provide comments is in Procedural Guidance # 13. Comments should be addressed to:

Department of Army  
Office of the Assistant Chief of Staff for Installation Management  
Attn: DAIM-ODF / PT-8710  
2511 Jefferson Davis Highway  
Arlington, VA 22202

Page intentionally blank

## Table of Contents

Chapter 1 Introduction .....	1-1
1-1. Purpose.....	1-1
1-2. Applicability .....	1-1
1-3. References.....	1-1
1-4. Background.....	1-2
Chapter 2 Organizational Responsibilities and Relationships .....	2-1
2-1. Assistant Secretary of the Army for Installations and Environment (ASA (I&E)).....	2-1
2-2. Office of the Assistant Chief of Staff for Installation Management (OACSIM) Headquarters, Department of the Army .....	2-1
2-3. Installation Management Command (IMCOM) – HQ & Regions .....	2-2
2-4. Installations .....	2-3
2-5. Non-IMCOM Headquarters, Regions, Installations, and Facilities.....	2-4
2-6. Contracting Agencies .....	2-4
2-7. Industry .....	2-5
2-8. Project Facilitator.....	2-5
Chapter 3 Energy Savings Performance Contracting Procedures .....	3-1
3-1. Basic Philosophy .....	3-1
3-2. Starting an ESPC Program at an Installation .....	3-1
3-3. ESPC Contract Methods Available .....	3-2
3-4. Measurement & Verification .....	3-3
3-5. Additional Considerations When Using an ESPC Contract.....	3-5
Chapter 4 Management and Execution .....	4-1
4-1. General Principles .....	4-1
4-2. Project Concept, Approach, Approval andHQDA Notification .....	4-2
4-3. Project Restrictions .....	4-4
Chapter 5 Resource Requirements .....	5-1
5-1. Funding .....	5-1
5-2. Staffing.....	5-2
5-3. Project Financing.....	5-2
5-4. Bonneville Power Authority.....	5-2
5-5. ESPC Costs Reimbursement from Benefited Tenants.....	5-2
5-6. Payments .....	5-3
Chapter 6 Reporting Requirements .....	6-1
6-1. Reporting Requirements.....	6-1
6-1. Frequently Requested Information.....	6-2
List of Acronyms.....	A-1
Attachments—Procedural Guidance 1 through 13	

Page intentionally blank

## Chapter 1 INTRODUCTION

### **1-1. PURPOSE**

This document establishes guidelines for Energy Savings Performance Contracting (ESPC) as authorized by 42 USC 8287, 42 USC 8251 through 8261, the *Energy Policy Act of 2005 (EPACT2005)*, and mandated by Executive Order (EO) 13423, *Strengthening Federal Environmental, Energy and Transportation Management*. It provides standard guidance and policy to assure the appropriate, efficient and effective use of ESPC within the Department of the Army (DA). The attached Procedural Guidance provides clarification for implementing an ESPC Task Order (TO) and shall be followed as part of DA ESPC Policy Guidance. As an attachment, OACSIM may update or add to the Procedural Guidance as required. The purpose of an ESPC is to reduce energy and water consumption, with ancillary benefits of achieving facility improvements, improving the quality of life in the Army, and ultimately reducing overall energy costs for the Installations. ESPC is an alternative procurement method used to take advantage of private sector expertise and capital so that energy and water conservation goals can be achieved. Under the terms of the ESPC, contractor costs are paid directly from actual performance savings resulting from the contractor's actions. For the purposes of this guidance, an Installation is defined as any individual Installation, group of Installations, or other facility (hospital, clinic, etc.) that implements an ESPC contract.

### **1-2. APPLICABILITY**

This guidance applies to all DA activities participating in the ESPC program and standardizes the implementation of an ESPC project. This document provides implementing guidance and is not meant to supersede any existing statute, EO, DoD Directive, or Army regulation.

### **1-3. REFERENCES**

- a. EO 12902, *Energy Efficiency and Water Conservation at Federal Facilities*
- b. EO 13123, *Greening the Government Through Efficient Energy Management*
- c. EO 13423, *Strengthening Federal Environmental, Energy and Transportation Management*
- d. Public Law 102-486, *Energy Policy Act of 1992* or *EPACT 1992*
- e. Public Law 109-58, *Energy Policy Act of 2005* or *EPACT 2005*
- f. Public Law 110-140, *Energy Independence and Security Act of 2007*
- g. 42 USC 8287, *National Energy Conservation Policy Act*, Title VIII, Section 801 to 804.

- h. 10 CFR 436, Subpart B, *Final Rule on Energy Savings Performance Contracts*.
- i. 48 CFR 15 (FAR Part 15) *Federal Acquisition Regulations System, Contracting by Negotiation*.
- j. 48 CFR 23.2 (FAR Subpart 23.2), *Energy and Water Efficiency and Renewable Energy*.
- k. 48 CFR 1.102 (FAR 1.102), *Guiding Principles for the Federal Acquisition System*.
- l. *Practical Guide to Savings and Payments in Super ESPC Task Orders* (available on the Department of Energy (DOE) website at [www1.eere.energy.gov/femp/pdfs/practguide\\_sav\\_paymnts.pdf](http://www1.eere.energy.gov/femp/pdfs/practguide_sav_paymnts.pdf))
- m. DOD Instruction 4170.11, *Installation Energy Management*.

#### **1-4. BACKGROUND**

- a. The *Energy Policy Act of 1992 (EPACT 1992)* established energy savings mandates for federal agencies. EO 12902 established a mandate that requires federal agencies to use 30% less energy in buildings per gross square foot by FY 2005 compared to FY 1985. Thousands of energy efficiency and renewable energy improvement projects were needed to meet that mandate. Since energy projects cost money, Congress authorized federal agencies to use private sector financing in the *EPACT 1992* to implement energy savings opportunities. One authorized source of financing is provided by Energy Service Companies (ESCOs) through ESPCs.
- b. EO 13123, revised previously mandated energy reduction goals (for example raising the facilities goal to a 35% efficiency improvement by FY 2010), and emphasizes the need to increase alternative financing methods such as ESPCs. The EO also addressed other energy related initiatives, such as use of renewable energy sources, use of "Energy Star" products, retention of energy savings, reduction of greenhouse gas emissions, and water conservation.
- c. *EPACT 2005* reset energy savings mandates for federal agencies, and established a new energy reduction goal of 2% annually based on a new baseline year of FY 2003, beginning in FY 2006. EO 13423 requires federal agencies to use 30% less energy in buildings per square foot by FY 2015 compared to FY 2003, essentially raising the *EPACT 2005* goal to 3% annually for executive agencies. EO 13423 also introduced a requirement for 2% annual water consumption reduction in FY 2008 through FY 2015 with FY 2007 as the baseline. Once again, thousands of energy and water efficiency and renewable energy improvement projects are needed to meet this mandate. Congress reauthorized federal agencies use of ESPC in *EPACT 2005* through the end of FY 2016 to assist agencies in implementing energy savings opportunities.



- d. The *Energy Independence and Security Act of 2007 (EISA)* permanently reauthorized ESPC for Federal agencies, and eliminated Congressional notification requirements.
- e. ESPC is a contracting methodology in which a private contractor (herein called the ESCO) performs services that include: evaluation, design, financing, acquisition, installation and maintenance of energy efficient equipment; altered operation and maintenance improvements; or technical services for a customer. The ESCO receives compensation based on the verified energy savings generated. Current statute (per 10 CFR 436 and EO 13423) allows DoD components to enter into such contracts for their Installations and/or facilities, excluding leased facilities (unless leased from another Federal agency). ESPC provides an alternative method of implementing energy and water conservation savings projects when Installation resources such as staff, technical expertise or funding, are not available. The savings must be guaranteed and the contracts are limited to twenty-five (25) years contract term.
- f. Having non-federal entities provide turnkey design, construction, and financing for equipment is a unique concept in service procurement and departs from familiar procedures. As of 1 January 2008, the Army has successfully executed over 115 ESPCs at more than 60 Installations located both within the continental United States (CONUS) and outside of the Continental United States (OCONUS), with an investment value exceeding \$800 million, and has gained significant knowledge and experience in the ESPC program. The Army's experiences are reflected in this policy guidance.
- g. The *EPACT 1992* authorized U.S. federal agencies to use private sector capital funding sources to finance costs associated with achieving mandated energy reduction levels. Regardless of funding source, federal mandates require that energy efficiency be significantly improved in federal facilities. As such, the government must achieve these mandated reductions by implementing energy efficient measures, either through appropriated funding sources or alternative financing approaches. In either case, the government assumes some level of risk related to the economic pay back associated with the installation of energy efficient technologies. Measurement and Verification (M&V) is not only an important tool to reduce government risk, but is required as a part of an ESPC contract. M&V is the process used to measure and verify if savings guaranteed by the contractor were actually realized.
- h. OACSIM requested an AAA audit of the Army's ESPC program to ensure that the program was being properly executed. The results noted a lack of resources and technical expertise at the Installation level, and recommended a more centralized approach for program execution and involvement of project facilitators.

Page intentionally blank

## **Chapter 2**

# **ORGANIZATIONAL RESPONSIBILITIES AND RELATIONSHIPS**

### **2-1. ASSISTANT SECRETARY OF THE ARMY FOR INSTALLATION AND ENVIRONMENT (ASA (I&E))**

The ASA (I&E) has overall responsibility for Installation facilities and housing, including oversight of the energy program. The ASA(I&E) monitors the ESPC program through the Annual Army Energy Report and various other reports.

### **2-2. OFFICE OF THE ASSISTANT CHIEF OF STAFF FOR INSTALLATION MANAGEMENT (OACSIM) HEADQUARTERS, DEPARTMENT OF THE ARMY**

The OACSIM responsibilities include:

- a. Serve as the Army's ESPC program proponent with overall authority and responsibility for execution of ESPC guidance and general oversight.
- b. Provide ESPC guidance to Army Commands and Components.
- c. Designate an OACSIM program manager to champion and manage the ESPC program and to serve as the primary OACSIM point of contact for ESPC issues. The ESPC program management duties shall be included in the employee's performance standards and annual performance evaluation. OACSIM shall ensure that personnel involved with ESPC contracts are adequately trained.
- d. Develop program guidance to standardize the implementation of the ESPC program and to resolve procedural issues.
- e. Identify and establish Army ESPC goals and associated resource requirements.
- f. Implement Army-wide Memorandums of Agreement (MOA)/ Memorandums of Understanding (MOU) with DOE, Defense Energy Support Center (DESC), U.S. Army Corps of Engineers (USACE), Army Contracting Command (ACC) and other agencies, as required.
- g. Participate in Tri-Service and Federal coordination meetings.
- h. Act as the Army point of contact (POC) to facilitate discussions with industry.
- i. Monitor the ESPC program to identify all issues impeding the successful implementation of the ESPC program.
- j. Include ESPC in the *Army Energy and Water Campaign Plan for Installations* in support of the Army Energy Strategy for Installations.

- k. Serve as the approving official for Army project facilitators, and maintain a list of approved Army project facilitators
- l. As the Army lead agent for ESPC, initiate discussions and partner with DOE to use their pre-competed Indefinite Delivery, Indefinite Quantity (ID/IQ) ESCOs.
- m. Prepare, maintain, and disseminate “lessons-learned” reports to program participants.
- n. Keep DASA (E&P) informed of ESPC efforts by providing quarterly ESPC status spreadsheet of all planned and ongoing ESPC projects regardless of investment value. For ESPC projects over \$10M investment value, notify DASA (E&P) after Notice of Intent to Pursue is received by OACSIM.

### **2-3. INSTALLATION MANAGEMENT COMMAND (IMCOM) - HQ AND REGIONS**

The division of responsibilities between HQ and Regions is to be determined by IMCOM. The IMCOM HQ and Region responsibilities include:

- a. Appoint a HQ IMCOM ESPC Program Manager in writing to champion and manage IMCOM’s ESPC program. The ESPC program management duties shall be included in the employee’s performance standards and annual performance evaluation. HQ IMCOM shall ensure that personnel involved with ESPC contracts are adequately trained. Advise ACSIM whenever there is a change in Program Manager assignment.
- b. Appoint a Region ESPC Program Manager in writing to champion and manage each Region’s ESPC program. The ESPC program management duties shall be included in the employee’s performance standards and annual performance evaluation. Regions shall ensure that personnel involved with ESPC contracts are adequately trained. Advise HQ IMCOM whenever there is a change in Program Manager assignment.
- c. Encourage Installations and Regions to use ESPC.
- d. Coordinate with the Installations on ESPC project identification, analysis, and execution procedures and activities as needed.
- e. Provide ESPC resource requirements and ensure Installation budgets are sufficient to pay for ESPC contractual obligations.
- f. Administer, coordinate, and review ESPC projects, as appropriate.
- g. Notify OACSIM of award of any ESPC project within 10 days after award.
- h. Ensure all Installations executing ESPC projects have an approved project facilitator prior to starting the ESPC process.
- i. Assist Installations to obtain resources and technical support.
- j. Establish HQ and Region level MOAs/MOUs with appropriate ESPC Contract Agencies, as required.

- k. Coordinate with OACSIM to surface and resolve policy/technical issues concerning ESPC projects.
- l. Provide ESPC input to the Annual Army Energy Report via the Army Energy and Water Reporting System (AEWRS) energy manager's database. Other ESPC reports will be provided to OACSIM, as required.

## **2-4. INSTALLATIONS**

Installation responsibilities include:

- a. Follow the procedures provided in the ESPC Procedural Guidance
- b. Installation/Garrison Commander responsibilities include:
  - Appoint an ESPC Program Manager in writing to champion and manage each Installation's ESPC program. The ESPC program management duties shall be included in the employee's performance standards and annual performance evaluation. Installations shall ensure that personnel involved with ESPC contracts are adequately trained and resourced.
  - Establish an ESPC Team for each project. The Team should include all key Installation staff, including, but not limited to, Director of Public Works, Resource Management, Legal, Contracting Officer (who has experience in ESPC and may be from a contracting agency other than the Installation contracting office), Engineering and Master Planning staffs, Union representatives, tenants, as well as the Project Facilitator.
  - Include ESPC status updates as an ongoing Performance Management Review item.
- c. Determine ESPC contract type/methodology to be utilized.
- d. Actively participate in:
  - ESCO selection.
  - Project identification and evaluation, feasibility and engineering reviews, M&V plan development, financing package development, delivery/task order award, and contract administration.
  - Resolution of energy baseline modifications and contract changes.
- e. Retain documentation and justification for energy savings baselines, including any adjustments to baseline, and measurement and verification methods used to determine the guaranteed savings for the life of the ESPC contract.
- f. Execute MOA with Contracting Agency, if applicable.
- g. Submit candidate projects to higher headquarters ESPC POC for review and concurrence.
- h. Perform all functional and engineering reviews at the Installation to ensure proposed projects meet Installation requirements including, but not limited to, master planning, safety, legal, environmental, and engineering. These

reviews may be completed by contractor staff on behalf of and in conjunction with the Installation staff.

- i. Review and approve project development and review schedule with ESCO and Contracting Agency. Establish milestone dates and manage project-related issues with ESCO to achieve scheduled milestones.
- j. Retain the services of a Project Facilitator.
- k. Approve ESPC projects within the limits of Installation approval/ordering authority. Issue delivery/task orders if Contracting Agency has delegated ordering authority to Installation Contracting Officer.
- l. Monitor all aspects of pre- and post-award ESCO performance. (The Contracting Officer, or an authorized representative, is responsible for determining post-acceptance savings levels.)
- m. Assume responsibility for equipment ownership, operation, maintenance, and repair at the end of contract or as negotiated in the contract. ESCO should be performing the O&M and R&R for the life of the contract unless a compelling reason to do otherwise is approved by higher headquarters.
- n. Input ESPC data into the Army Energy and Water Reporting System's Energy Manager's database to support the Army Annual Energy Report within 15 days after award.

## **2-5. NON-IMCOM HQ, REGIONS, INSTALLATIONS AND FACILITIES**

Non-IMCON Commands, Regions, Installations, and Facilities must comply with the requirements outlined above to the extent that the RELATIONSHIPS exist in the Command structure.

## **2-6. CONTRACTING AGENCIES**

Contracting agencies provide Installation and Region-level ESPC project support, as appropriate. Contracting Agency responsibilities include:

- a. Provide central POC for Installation or task order, as appropriate.
- b. Conduct the ESCO selection process in coordination with requesting Installation. Provide justification for selection.
- c. Develop and present training workshops, as required, for delegation of contract ordering authority to Installation-level Contracting Officers.
- d. Provide legal and contract support and/or consultation services. Additional service may be made available by the contracting agency, but are not mandatory.
- e. Develop a schedule for project development in collaboration with the Installation and ESCO. Gain written concurrence from all parties.

- f. Work with the Installation to develop and disseminate performance metrics for the ESCO's prior TO award and refine M&V process, require ESCO to provide valid and measurable performance reports, and provide regular performance evaluation and process improvement discussions with the Installation and ESCO to assist them in improving their customer satisfaction rating.
- g. Provide cost projections/estimates for ESPC contract/technical services and report all actual project-related expenditures as requested by the Installation, command or OACSIM.
- h. Provide post-TO award contract administration and assistance for the life of the contract.
- i. Execute, administer and close out contracts, as applicable.

## **2-7. INDUSTRY**

Industry (ESCO/ESCO Team) is a full partner with the government. Expectations for Industry include:

- a. Ensure overall project success (project development, execution, M&V, performance period services, and overall project performance).
- b. Provide a clearly written and **measurable** performance guarantee for each project.
- c. Participate in project development and review schedule with the contracting agency, Installation and Project Facilitator to establish roles and responsibilities and milestone dates, and manage project-related issues, as necessary, to achieve scheduled milestones and expectations.
- d. Coordinate with Installation ESPC Program POC, Project Facilitator and Contracting Officer, to develop projects within Contracting Agency, Command, and DA policy guidelines and program milestones.
- e. Provide training for personnel at Installations, as required.
- f. Market ESPC services to Installations.
- g. Follow Procedural Guidance attachments to the *DA Policy Guidance for Implementation of an ESPC*.

## **2-8. PROJECT FACILITATOR**

**A Project Facilitator is required on all ESPC projects and must be pre-approved by either OACSIM or DOE.**

The success of an ESPC project depends on the Installations commitment of adequate resources – drawn from within the Installation or from elsewhere – to ensure sufficient support to both the ongoing Installation missions and the ESPC project. ESPC is used most effectively when the Installation's management fully understands the proposed project, required resources, makes a commitment at

the outset to allocate the necessary resources, and establishes teamwork as a high priority for Team members. The tasks and interactions required to develop and implement an ESPC project have become a well-defined, but flexible, process that can minimize costs and expedite the work necessary to begin realizing energy and cost savings as quickly as practicable.

**When assembling the acquisition team OACSIM requires that the Installation include an independent 3<sup>rd</sup> party ESPC Project Facilitator on the acquisition team.** The Project Facilitator (PF) is required to assist the Installation staff in developing the project from inception to award and ensuring that all steps in this policy guidance are followed. The Project Facilitator must be an individual from outside the Installation, and must meet the following qualifications:

- a. A demonstrated level of corporate experience dealing with alternatively financed projects.
- b. A demonstrated understanding of the issues involved in federal procurement of energy efficiency, water conservation, and renewable energy projects.
- c. Familiarity with the respective ESPC vehicles and established guidelines to assist with the execution of an ESPC project.
- d. In-depth familiarity with the technical and financial analysis tools to be used in project reviews, as developed by FEMP.
  - 1) Applicable Background (Engineer, CEM, Contracting or related experience)
  - 2) Continuing Education (DOE ESPC TO Training, M&V Training, other)
  - 3) Recent Experience (Minimum 10% of prior year's time spent on ESPC projects or Shadowing a qualified PF for one entire ESPC project through construction)
  - 4) Project management experience

The goal of the Project Facilitator is to lead the Installation through the process of developing and implementing their delivery/task orders, while ensuring that projects are completed successfully, in a timely manner, and deliver the best value to the government. Not all Energy Conservation Measures (ECMs) will prove to be cost-effective or feasible, and in fact, many ECMs may never make it past the life cycle cost stage. The Project Facilitator is responsible for ensuring that a sound baseline is properly developed; that the project is economically and technically feasible, that the stated paybacks can be achieved, and a detailed M&V plan is developed and implemented, and all aspects of this policy guidance have been followed. The Project Facilitator is also responsible for keeping the project on schedule and providing the overall audit trail of the project. The level



of support from a Project Facilitator is flexible and based upon the Installation's needs and desires with input from the contracting office. A memorandum of understanding (MOU) and an interagency agreement (IAG) that defines the expectations, roles, and responsibilities of the Project Facilitator and the Installation should be finalized and signed prior to the Project Facilitator starting.

Page intentionally blank

## **Chapter 3**

# **ENERGY SAVINGS PERFORMANCE CONTRACTING PROCEDURES**

### **3-1. BASIC PHILOSOPHY**

A successful Energy Savings Performance Contract requires recognition and acceptance of the unique aspects of the contract relationship. ESPC is a partnership-based proposition requiring a high degree of commitment from all parties. A successful ESPC contract requires mutual commitment from the Government and the ESCO to become true partners in the enterprise. Both parties must enter into the contract in good faith. Energy Savings Performance Contracting is a long-term relationship. The ESCO and the Government must both be aware of the specific goals and objectives of the proposed project(s). For this reason, goals and expectations should be specific and well-documented. ESPC can be an effective tool to achieve energy reductions in federal facilities, but in order to maintain the program's viability, cost-effectiveness and functionality, diligence must be exercised and a spirit of genuine partnership must exist. For large (over \$10 million) ESPCs it is recommended that a formal "partnership" development training exercise be held. This training has been successfully used in large construction projects and can rapidly develop an atmosphere of joint-ownership of the project resulting in significantly improved communication and a mutually beneficial approach to problem solving.

In addition, it is useful for the parties to discuss and determine the path forward given various scenarios: 1) the project exceeds expectations, 2) the project meets expectations, 3) the project does not fully meet expectations, but still saves energy, and 4) the project does not meet expectations and uses more energy than before. By clearly mapping out and defining future scenarios, future difficulties can be mitigated. Using the FEMP guidance and very clear and strict guidance for measurement and verification of performance, coupled with standard operating procedures for each outcome, will limit surprises and lead to a viable, honest partnership.

### **3-2. STARTING AN ESPC PROGRAM AT AN INSTALLATION**

- a. The first step is for the Installation to make a decision whether or not to consider ESPC. For example, a small Installation or an Installation with a small energy/water bill may not be very attractive to an ESCO, since the investment would be rather small compared to the opportunity cost on the part of the Installation and the ESCO. It may not be worth the time and effort given the return on investment. Assistance for this assessment may be available from OACSIM, IMCOM, USACE, DOE or others.
- b. The next step is for the Installation staff to assign a responsible program POC who has sufficient time to dedicate and experience to manage the ESPC program. The Installation POC contacts the IMCOM Region ESPC Program Manager for assistance and to discuss options, alternatives, and the potential

to issue an ESPC contract to meet the Installation's requirement. Procedural Guidance #1 provides a flow chart of the tasks to be performed by each organization and Procedural Guidance #2 provides a checklist to document the tasks as they are completed.

- c. The Installation POC makes an internal, informed decision that a requirement exists and the requirement cannot be funded through existing operating funds. This need can be as basic as an upgrade or modernization of an existing HVAC system or as complex as upgrading and expanding a boiler system in order to save energy. After exploring other funding sources and determining that the funds will not exist or cannot meet the required timeline, an ESPC may be the solution. An ESPC provides a way to achieve these mission-related facilities improvements by bundling them with rapid payback energy efficiency improvement measures to allow alternative funding of the total facility improvement. Use of an ESPC may free up the Installation's resources for other projects since the ESPC contractor will usually provide the maintenance and operation services on equipment installed under the ESPC.
- d. Energy Engineering Analysis Program (EEAP) assessments and DOE Federal Energy Decision Screening (FEDS) assessments are good sources for identifying potential ESPC projects. Installations interested in hosting an EEAP or FEDS assessment should contact their IMCOM Region energy POC for assistance.
- e. Next, the Installation ESPC POC establishes an ESPC Team. The Team should include all key Installation staff, including, but not limited to, Director of Public Works, Resource Management, Legal, Contracting Officer (who has experience in ESPC; may be from a contracting agency other than the Installation contracting office), Engineering and Master Planning staffs, Union representatives, tenants, as well as the Project Facilitator. All team members should participate in ESPC process training or have had ESPC process training in the past.
- f. The Installation Team needs to identify key issues requiring coordination/review before implementing an ESPC project. Such issues include integration of ESPC projects into other ongoing projects, master plans, demolition plans, proper layouts, environmental considerations, etc. The Installation must ensure the results of the ESPC project will fit into the Installation's overall Energy Management Plan. The Installation should explore the various ESPC contract options and compare them to other financing alternatives. Other financing alternatives include Utility Energy Services Contracts, and Enhanced Use Leasing, as well as more traditional programs such as the Energy Conservation Investment Program. Discussion of these options is beyond the scope of this document.

### **3-3. ESPC CONTRACT VEHICLES AVAILABLE**

There are four basic methods of contracting for ESPC services. Each contract option has specific advantages and disadvantages. Consider costs, availability

of funding for up-front costs and manpower for each of the contract methods considered. A determination should be made as to which is the best contracting method to meet the unique conditions and requirements at the specific Installation.

- a. **USE AN EXISTING INDEFINITE DELIVERY/ INDEFINITE QUANTITY (ID/IQ) CONTRACT.** Use of an existing ID/IQ ESPC mechanism can significantly reduce the contracting effort and shorten the time to implement projects. The reduction in the number of proposals, use of established terms and conditions, and simplified selection procedures can significantly expedite the acquisition process. Initial Task Orders are typically awarded within 9-12 months from date of request; follow-on Task Orders are usually awarded much faster (typically 90 days), as the ESCO becomes more familiar with the Installation and the Installation's requirements. Timeframes for award vary greatly depending on the number and type of ECM included. Three sets of ID/IQ contracts (U.S. Army Engineering and Support Center (CEHNC), DOE, and General Services Agency (GSA)) are currently available to Army Installations and are described in Procedural Guidance #3.
- b. **CONTRACT FOR UNSOLICITED PROPOSALS FROM PRE-QUALIFIED ESPC CONTRACTORS.** This is a special method allowed under the law. All unsolicited proposals for ESPC are exempted from the criteria to be "unique and innovative". See Procedural Guidance #9 for guidance on how to use this method.
- c. **NEGOTIATE DIRECTLY WITH AN ESPC CONTRACTOR COMPETITIVELY SELECTED BY A UTILITY COMPANY.** An Installation may negotiate directly with an ESCO that has been competitively selected by a utility company serving the Installation. See Procedural Guidance #10 for guidance on using this method.
- d. **DEVELOP A NEW CONTRACT.** An Installation may develop its own contract with prior approval from higher headquarters. This process often takes two to three years to execute, and should be considered as a last resort only when other contracts can not meet the needs of the Installation. The use of this method is described in Procedural Guidance #11.

### **3-4. MEASUREMENT & VERIFICATION**

- a. Measurement and Verification (M&V) is the single most important part of the ESPC and is the basis for payment of the contract fees. It is very important to note in that the M&V process there are two things to measure – performance before and performance after the implementation. A well-defined measured baseline that establishes energy performance before implementation is critical. Using metered data with a long and diversified history is the best methodology. Calculated or estimated baselines can be used, but introduce the potential for error, misjudgment, and poor contract performance. If calculated or estimated baselines are used, the computer models should be validated by field work and “calibrated” so it closely resembles “real world” on

site energy performance. M&V establishes a definable and verifiable baseline, determines the savings, and verifies continued achievement of the savings guarantee. It can be as simple as installation of a gas or electric sub-meter or as complex as an engineering model, supported by metered data depending on the project. Performance reflects both energy consumption and time (e.g. kilowatts per hour). Both utility consumption and operating hours may need to be verified if meters are not used to determine electric demand and consumption, natural gas demand and consumption, and water consumption and frequency of use.

- b. The requirement for an *effective* M&V approach for every ESPC project cannot be over-emphasized. It is essential that all partners fully understand and agree to the criteria used to develop the energy consumption baseline and the broader M&V plan. The M&V protocol that will be followed must be acceptable to both the ESCO and the government, prior to award of the Task Order. Cost of the M&V option must also be taken into consideration. Metering costs could exceed energy and cost savings and eliminate an otherwise attractive project from consideration. **The stipulated savings option should be used rarely, and only when metering is not cost effective.** Even so, the stipulated savings should be supported by measured data.
- c. Each TO is required to have an independent M&V plan with the costs for conducting the M&V included in the TO. The International Performance Measurement and Verification Protocol (IPMVP) is an internationally recognized M&V guidance document that provides high level guidance on the formulation of technology-specific M&V approaches. The Federal Energy Management Program (FEMP) M&V Guideline was written for Federal contracting teams and for contractors engaged in energy projects with Federal agencies. The FEMP M&V Guideline represents a specific application of the IPMVP. When there is a difference, the FEMP Guidance takes precedence over the IPMVP. This standard protocol should be the starting point for development of the M&V plan. The Installation level Project Manager is responsible for ensuring that all partners comply with the approved M&V plan. The Installation may contract with an independent third party to develop/write the M&V plan, monitor, and/or audit M&V compliance if necessary. A complete set of the Department of Energy FEMP M&V resources can be found on their website at:  
[http://www1.eere.energy.gov/femp/financing/superespics\\_mvresources.html](http://www1.eere.energy.gov/femp/financing/superespics_mvresources.html).

A brief description on how to develop an M&V approach for an ESPC project is provided in Procedural Guidance #2D. The content and format of the M&V plan must follow the M&V Plan Outline included in Procedural Guidance #2L.

- d. A project specific cost-benefit analysis must be conducted to assess the value of a given M&V approach. There must be a clear understanding among all partners of the importance of an M&V plan that adequately verifies the savings, while continuing to measure and revalidate the savings in the out years of the contract.

- e. Long-term operations and maintenance (O&M) of installed equipment will assure continued guaranteed savings, but can be expensive and must be balanced with good judgment and reasonableness. Cost-effective M&V programs should be balanced, taking into account project-specific customer requirements, responsibility allocation for performance and operational parameters, project economics and project technology. The value of the project, complexity of the proposed ECMs, and cost-effectiveness of the proposed measurement and verification approach should be kept in mind when determining the appropriate level of M&V.

### **3-5. ADDITIONAL CONSIDERATIONS WHEN USING AN ESPC CONTRACT**

- a. **The “Easy Way”:** Ease of contracting process is not sufficient justification for choosing one option over another. Neither is selection of a firm based solely on past performance. Selection must meet the specific needs of the Installation.
- b. **Partnering:** Treat your ESCO partner as you would a respected co-worker. Make all relevant facility information available and work with the ESCO as they develop projects for the Installation. Make the ESCO partner aware of the Installation’s overall master plan, consider providing on-site facilities for their personnel, provide access to all relevant site facilities, and introduce to all key players/offices. **Do not ask the ESCO partner to provide proposals on projects that you do not intend to follow through with.** This is a waste of the ESCO’s resources and may subject the Installation to claims by the ESCO.
- c. **Technical reviews:** Technical reviews of delivery/task order proposal submissions should be performed to ensure that the product supports the mission need. Installation personnel or other technical support services (hired by the Installation) should perform these reviews. It may not be necessary to perform complete detailed reviews of ESCO project drawings to determine if the projects will work when they are approved and certified by professional engineers and architects; but as a minimum, interface validation must be reviewed and confirmed with regard to environmental considerations; life, health, and safety issues; fire codes; and as-built existing building conditions. ESCO project economics and proposed measurement and verification must be reviewed in detail. The ESCO is responsible for the successful implementation and continued performance of the projects.
- d. **Location:** Existing ID/IQ contracts may have specific contractors assigned to geographic areas. If a specific ESCO is preferred, be sure that the ESCO is available in your area. Be aware that 48 CFR 16.505 (Far 16.505) requires contracting officers to ensure fair opportunity for all contractors to receive work under a multiple award contract and Section 803 of the National Defense Authorization Act for Fiscal Year 2002 (Pub. L. 107-107) implemented in DFARS 216.5, requires that the contracting officer provide a fair notice of intent to make the purchase and must afford all contractors

responding to the notice a fair opportunity to submit an offer and have that offer fairly considered. Task orders under multiple awards ID/IQ contracts must be handled in accordance with the procedures outlined in FAR 16.505. A desired ESCO may not necessarily be assigned to your Installation if other ESCOs have not received awards under the contract. However, methods, such as allocation or designation in any way of any preferred awardee(s) that would result in less than fair consideration being given to all awardees prior to placing each order, are prohibited.

- e. **Availability of In-house Staff:** Each ESPC contract vehicle has specific requirements for Installation participation (see Procedural Guidance 1 through 11). Be sure you have, or can get, the personnel and expertise needed to complete your responsibilities under the contract. If you are uncertain on the level of expertise or technical skills needed, contact your Region ESPC Program Manager to determine the type of support needed for the procedures where you are not proficient.
- f. **Savings:** Savings dollars are finite, and the number of savings dollars available to fund such services limits the scope of services provided under ESPC. The economic viability of an energy project is generally determined by comparing the current level of energy expenditures and operating costs with the total capital project costs, future operating costs, and applicable financing rates. Installations that have lower energy rates or cost per square foot cannot expect ESPC to have the same economic benefits as an Installation that has higher per unit energy costs. Hence, Installations (especially those with lower energy rates) must carefully prioritize how and where they wish to spend their limited savings dollars.
- g. **Project Margins:** The Percent Increase of Amortized Cost is the maximum percent difference between the contractor's proposed payment over the combination of amortized estimated capital cost and O&M costs of the energy conservation measure(s), and includes: the cost to perform surveys prior to approval of feasibility studies (e.g. initial audits and site surveys); indirect labor; overhead costs; sales; general and administrative (G&A) expenses; prime contractor markup of subcontractor-supplied equipment, material, or labor; profit to the contractor; and other costs that are not directly attributable to the project. It is important that the margins be negotiated early in the project development process and as soon as there is a good understanding of the complexity and degree of difficulty expected for the respective energy measures.
- h. **Risk:** As previously stated, the government is required to reduce energy consumption, if cost effective, regardless of funding source. Under federally funded energy conservation programs, such as the Energy Conservation Investment Program (ECIP), the government has borne 100% of the performance risk of those projects. ESPC can shift some of the government's risk to the ESCO, but the quantity of cost savings available is typically not adequate to compensate the ESCO for assuming 100% of a project's risk



over an extended contract term. The ESPC partnership process must be used to jointly minimize risk for both parties.

- i. **Other Considerations:** Conditions at a particular site, other than technical or contract specific issues may be of critical concern in the individual acquisition plan. The need for specialized environmental remediation, concern for potential mission changes (Base Realignment and Closure action, A-76, etc.), potential for the privatization of utility systems, possible future utility rate changes, and the potential impact of the electricity industry restructuring issues on the economics of the proposed actions, are examples of such issues. The acquisition team must consider all relevant issues in making the “best value” determination for their particular and unique facility.

Page intentionally blank

## **Chapter 4**

### **MANAGEMENT AND EXECUTION**

#### **4-1. GENERAL PRINCIPLES**

This policy guidance provides an approach for successfully implementing ESPC within DA. The principles underlying this approach are:

- a. Foster improved partnerships & improved communication between government and industry partners.
- b. Partner with DOE and CEHNC to provide access to a group of experts, independent of contract agency, for Installation or Regional representatives to call upon for help and guidance.
- c. Implementation and rigorous use of project management plans and schedules by all partners in the ESPC process to assure timely project implementation and realized savings.
- d. Strong Installation level emphasis and support of individual projects and overall program objectives.
- e. Strong command emphasis on highlighting and strengthening general awareness of program objectives.
- f. Provide required oversight to ensure program requirements are completed and standards are met.
- g. Provide technical and alternative financing contracting instruction and follow-up support for program participants.
- h. Provide active lessons-learned forum to provide the latest feedback and guidance to program participants. Lessons learned will be included in the Army Energy Program Newsletter, and presented at the annual Army Energy Forum.
- i. Allow program flexibility for aggressive and innovative ESPC implementation.
- j. Develop and implement innovative and simplified administration and contracting procedures, such as the increased use of the Design/Build contracting methodology.
- k. Consider sound business judgment and what is in the best interest of the government. As a final check, consult with your Staff Judge Advocate General.
- l. Streamline the ESPC process to make it more effective and timely in execution.

## **4-2. PROJECT CONCEPT, APPROACH, APPROVAL AND HQDA NOTIFICATION**

- a. This policy guidance provides an effective procedure for improving the probability of awarding successful ESPC contracts and delivery/task orders. Individual Installation initiative and support is the key element for success in this program. Additionally, providing effective training to all involved personnel, contractual guidance, and competent technical support to the command and Installations within DA are vital.
- b. All projects will be reported for tracking purposes per directions in Procedural Guidance #2A. Project documents will be forwarded through the Installation's chain of command.
- c. **PROJECT APPROVAL PROCESS:** The appropriate approving official for an ESPC project is dependent upon the total dollar amount that the government will be obligated to pay. The total dollar amount the government will be obligated to pay is the cancellation ceiling cost determined by the amount needed to repay the ESCO plus the total of the interest payments for the term of the contract. HQ IMCOM will review and approve all ESPC projects below \$10M with notification to OACSIM prior to award of an ESPC TO. OACSIM will approve all ESPC projects over \$10M. See Procedural Guidance #2K for additional information.
- d. Use existing ESPC contractors to execute ECIP projects when the result promotes overall efficiencies in the project execution and implementation. It may be desirable to award an ECIP project to an assigned ESCO for construction of the project, but such awards are not made using the ESPC contract vehicle. If an Installation chooses to use an ESCO for an ECIP project they must prepare a sole-source Justification and Approval (J&A), and submit the request through the chain of command to the ECIP Program Manager at OACSIM for approval and forwarding to HQUSACE.
- e. Military Construction rules do not permit mixing of OMA funding (O&M and utility funding) with MCA funding. This prohibition prevents using ESPC in conjunction with a MILCON project.
- f. ESPC projects are not limited to the purchase and installation of energy efficient equipment, but encompass technical services, and new and innovative operation and maintenance procedures. Any project that reduces energy consumption and/or the total cost of energy, if previously identified or anticipated in the competed ESPC scope of work used to issue the task order, should be investigated for ESPC potential. **PAYMENTS TO THE ESCO FOR NEGOTIATING A LOWER UTILITY RATE CANNOT BE PAID THROUGH THE ESPC PROGRAM.** The Army should be negotiating a lower utility rate on its own and not relying on ESCOs for this service. For guidance on negotiating utility contracts, see AR 420-41 and AR 27-40.
- g. While the Energy Policy Act allows operations & maintenance (O&M) savings to be applied to ESPC contract payments, caution must be exercised in using

this provision. Savings must be real and verifiable, so that the Installation doesn't run the risk of a savings shortfall, which could create problems making contractor payments. For example, O&M savings credit is acceptable when the ESPC contract replaces contract labor that can be terminated. This credit should equal the reduction in contract costs. Simply shifting O&M payments from a service contract or base maintenance contract to the ESCO can not be counted as savings, since the cost of O&M must still be paid. O&M credit for in-house (civilian pay) labor savings is less clear because no personnel are eliminated. ESPC contracting agencies handle this issue differently. DOE has issued programmatic guidance to assist federal agencies in understanding what constitutes energy and energy-related cost savings and payments under ESPC. Work that encompasses O&M type savings or other savings that does not eliminate actual costs or produce actual savings versus avoided costs will not be accepted as an ESPC type project.

- h. The requirement for an Office of Management and Budget (OMB) A-76 "competitive sourcing" study applies only if the use of ESPC replaces government employees with contractor employees. A-76 does not apply to situations where the government employee's work is eliminated by the ESPC project.
- i. Utility privatization generally improves the systems outside the buildings, while ESPC generally improves the systems inside the buildings. While the use of ESPC may seem to conflict with utility privatization initiatives, they are often complementary. Before awarding an ESPC contract, verify that the contract terms won't unnecessarily restrict the potential for otherwise unrelated privatization projects.
- j. Installations in the United States shall not enter into ESPC projects in the family housing area, without prior approval from OACSIM. With the onset of Residential Communities Initiative (RCI) and the length of time to pay off most ESPC projects, the Installation runs the risk of having to buy out ESPC projects early before realizing the full savings benefits. Although the Installation is restricted from entering into an ESPC contract in the housing area, they should continue to seek out energy conservation measures (ECM) that have a short payback period and can be funded by the Installation.
- k. Work with Master Planner to validate that the buildings included in an Energy Conservation Measure (ECM) do not appear on the excess inventory or demolition lists or are not planned for demolition during the lifecycle of the project. This should be done when initiating the project and again on final review before award.
- l. The intent of Congress in establishing alternative financing approaches appears to have been twofold: 1) limit capital investments required by the government to increase efficiency by leveraging operating cost reductions to offset debt service, and 2) mitigate risk to government by placing project performance risk on the ESCO as a means of ensuring that operating cost

reductions are sufficient enough to offset debt service. Although ESPC provides some performance assurances to the government, it does not eliminate the risk completely. The ESCO is compensated through savings and their level of compensation is proportional to the amount of risk they must assume. The more risk the government places on the ESCO, the more costly the ESPC project becomes to the government. Effective use of ESPC requires that Measurement & Verification (M&V) be balanced with due diligence on the part of the government to assure that the balance of risk between the private and public sector results in the best value to the government in each specific case. The degree to which risk and risk mitigation is evaluated must also be balanced with the fact that each day of delay in implementing energy savings measures at Army facilities results in the permanent loss of potential cost savings and the related facilities improvements these funds could have purchased. The overall balance is the degree of risk versus the costs of risk mitigation. If the costs of mitigation are more than the risks themselves then review other contract vehicles or financing alternatives.

#### **4-3. PROJECT RESTRICTIONS**

- a. The *EPACT 1992* does not prohibit the use of ESPC in new construction. However, Military Construction (MILCON) rules do not currently permit this use, as it may be viewed as an augmentation of funds issue, which is a very serious offense. **It is both DOD and DA policy that ESPCs will not be used in conjunction with MILCON funded projects.**
- b. In keeping with other DA policy, no ESPCs will be allowed in buildings that are less than 3 years old.
- c. Garrisons will not be bundled together in one TO. Exceptions may be requested in writing from OACSIM.
- d. A few possible ECMs are not permitted in Army ESPCs. These include:
  - 1) Payments to the ESCO for negotiating a lower utility rate cannot be paid through the ESPC program, unless it includes capital improvements. An example of such a capital improvement would be installation of transmission voltage transformers to enable a wholesale transmission electric rate. The Army should be negotiating a lower utility rate on its own and not relying on ESCOs for this service. For guidance on negotiating utility contracts, see AR 420-41 and AR 27-40.
  - 2) Installation of equipment/controls on non-government property, including, but not limited to, Energy Miser controls on vending machines, and software to activate Energy Star controls on computers. These or similar features may be written into equipment specifications outside of the ESPC project.
  - 3) Installation of any measures in buildings scheduled for demolition during the life of the ESPC contract.

- 4) Any ECM for which the life expectancy of the installed equipment does not exceed the length of the contract, unless replacement of the equipment before the end of the contract period is included in the ECM.

Page intentionally blank



## **Chapter 5**

### **RESOURCE REQUIREMENTS**

#### **5-1. FUNDING**

- a. Within the ESPC program, there are a number of expenses that will be incurred by the Government prior to contract award and during contract administration. Expenses are those normally incurred during the contracting process and include such cost items as engineering support, economic analysis, contracting, and legal counsel. Whether work is performed by the Installation or is transferred to another agency, an expenditure of funds to develop a project will be required. These costs must be factored into the economic analysis for determining whether or not to pursue ESPC, or if a project is economical.
- b. A comprehensive listing of criteria for documentation for ESPC project approval is listed in Procedural Guidance #2K. Application of these criteria is meant to ensure that Government resources are invested in projects that have a high probability of generating savings that offset Government expense.
- c. Programming and obtaining funding for project development, award, and execution is a Command/Installation responsibility. When the funding package is developed it should follow the basic guidelines for cost and savings identified in the procedural guidance. These costs and savings must be forwarded to the Resource Manager (RM) to ensure the funds stay in the Installation utilities account ("J-account") to cover the contractor's costs and preserve the savings split between the Installation and the ESCO. It is OACSIM policy that Installations apply 100% of the savings generated to pay off the financing as early as possible. The savings from the ESPC project are not to be diverted from the J-account until the contractor is paid in full.
- d. Installations may enter into a multi-year ESPC contract for a period not to exceed 25 years, without funding of cancellation charges before cancellation. (Example: A contract has a 10-year repayment plan with an initial \$10M cancellation cost. The contract can be awarded provided that funds are available and adequate for payment of the costs of such contract for the first fiscal year, instead of having to provide funds for the entire contract). Cancellation cost schedules are set forth in ESPC contracts to allow the government to buy out the contracts (in part, or in whole) during the term of the contract. Contract buyouts due to BRAC closures (full or partial) will be paid with BRAC program funding. Contract buyouts due to other mission changes or Army-driven initiatives are the responsibility of the Command/Installation. Buyout of individual ECMs, in whole or in part, is not encouraged since the buyout of a quick payback measure may affect the economics of the entire project. Consider renegotiating the TO if one or more ECMs need to be canceled. Buyouts generally require the installation to pay

the ESCO the termination amount, as specified in the ESPC contract cancellation cost schedules, when the government terminates the contract for the convenience of the government.

- e. Buydown and Buyout Prepayments allow the use of government funds (appropriated or non-appropriated (NAF)) to reduce the contract length at any time during the contract term, if such funds are available. OACSIM recommends that Installations use excess funds to buydown (or lower the financed amount on) a new contract with long payback ECMs, rather than buyout (or pay off the termination cost of) an old one. For more information on buydowns and buyouts, see the DOE guidance on at: [http://www1.eere.energy.gov/femp/financing/uescs\\_buyoutapp.html](http://www1.eere.energy.gov/femp/financing/uescs_buyoutapp.html).

## **5-2. STAFFING**

Implementation of the ESPC program should be accomplished using existing resources. Each activity involved in the program must obtain necessary manpower to accomplish the project objectives. It is envisioned that the ESPC program will utilize personnel who are currently working in existing facilities management programs (e.g., energy conservation). Personnel involved in the ESPC program will generally require additional training to become knowledgeable of ESPC procedures. The Command/Installations may elect to obtain reimbursable support from other activities to meet ESPC program personnel requirements.

## **5-3 PROJECT FINANCING**

There are several contracting options that will be available for accessing third-party financing. Standardized financial clauses are included in the Procedural Guidance #8. These financial clauses have been negotiated with the ESCOs and Financial Institutions to provide the lowest rates and best terms possible for the government. ALL CONTRACTS WILL REQUIRE THE ESCOs TO COMPETE AMONG FINANCIAL INSTITUTIONS FOR THE BEST FINANCING DEAL, REPORT THE RESULTS OF THIS COMPETITION AND JUSTIFY THEIR SELECTION TO THE GOVERNMENT.

## **5-4. BONNEVILLE POWER ADMINISTRATION**

Bonneville Power Administration financing can not be used to fund or buydown ESPC projects as the authority that governed the use of BPA in ESPC projects, 10 USC 2865, has been repealed.

## **5-5. ESPC COSTS REIMBURSEMENT FROM BENEFITED TENANTS**

Commands/Installations seeking ESPC costs reimbursement from tenants benefiting from the ESPC project shall negotiate with the tenants a separate reimbursement baseline contract/agreement, or intra/inter-service support agreement (ISSA), for the recovery of their share of the ESPC cost and savings

in advance of the TO award. The reimbursement of ESPC savings shall conform to DoD and Army reimbursable policies. The reimbursement baseline contract/agreement, ISSA, shall be negotiated as soon as the ESPC contractor payment baseline is established. Tenant reimbursement should correlate with improvements done in tenant spaces. For proper coordination, the tenant should be advised of the proposed project and related benefits before the work begins.

The value determined in the ESCO contract that is attributed to a reimbursable customer will be part of their monthly assessment unless they provided in writing, prior to the award of an ESPC, that he does not want to take part in the ESPC and the government chooses to complete those ECMs that benefit that reimbursable customer in the best interest of the Government. Existing reimbursable customers who now do not want to contribute can buy out the value attributed to them by providing such request in writing to the contracting officer and then making arrangements to buy down that portion of the ESPC. All reimbursable customers are responsible to comply with federal energy and utility reduction requirements. If they opt out of reimbursement for the value of benefit to them, then they are accountable to achieve the annual reduction goals on their own. Failure to meet the annual goals in any two year contiguous FY periods allows the installation to step in and require them to participate in either an ESPC or appropriated funded utility reducing program and they would then be required to pay their portion. They will have the right to buy out those ECM at any time they want to fund the improvements on their own but will be required to meet the two year contiguous FY periods of meeting federal requirements.

## **5-6. PAYMENTS**

The contractor shall only be compensated based on measurable energy savings or other savings (per the ESPC project M&V plan). It is extremely important that the ESPC contract accurately define the energy or water baseline. The method with which savings will be measured and the projected energy or water use will have to be established and mutually agreed upon up front. Government payments must be made from the funding account that realizes the savings as a result of implementing the ESPC project. Payments may be made from annual utility (QDPW-J) and/or related operations and maintenance funds (QRPA). All ESPC related payments for project development, project facilitators, pre-award and post-award services will be charged to the QDPW-J account. Only savings that are reflected in the garrison's accounts for energy as reduced expenses in (QDPW-J) or energy-related SRM work (QRPA) can be applied to contractor payments. The aggregate annual payments by an Installation to the utilities, the ESCOs, and related O&M activities under an ESPC, may not exceed the total amount that the Installations would have paid to the utilities and related operations, maintenance, and repair costs, if the ESPC were not implemented (as estimated by the baseline procedures specified in that contract). **An annual energy reconciliation, or true-up, must be conducted to verify savings and ensure payments are accurate.** A copy of the reconciliation report must be kept on file for the life of the ESPC contract.

Page intentionally blank

## Chapter 6

# REPORTING REQUIREMENTS

### 6-1. Reporting Requirements

- a. Reporting requirements are derived from three primary sources: Mandated (Legislation), Mandated (internal Army leadership), and Special Reports (generally unscheduled, one-time reports). Most are routine but formats may vary from year to year.
- b. The detailed information that pertains to each report can be found in the Procedural Guidance listed with each report. The following are mandatory reports that the Installation must submit at the specified intervals (please note that these internal reporting requirements may differ from contractually required reports as recommended in Procedural Guidance 2I);
  - 1) **“Notification of Intent to Pursue an ESPC TO”**

**INTERVAL:** Once. Submitted to OACSIM, through higher headquarters, once the Installation receives the Initial Proposal, at least 30 days prior to accepting the Initial Proposal.

Procedural Guidance # 2A
  - 2) **“Notification to Congress”** - *No longer required*
  - 3) **“Request for Project Approval”**

**INTERVAL:** Once. Submitted to higher headquarters as appropriate.

Procedural Guidance # 2K
  - 4) **“Notification of Intent to Award an ESPC TO”**

**INTERVAL:** Once. Submitted to OACSIM, through the chain of command, after final negotiations, review and approval has occurred and the Installation has decided to award an ESPC TO.

Procedural Guidance # 2J
  - 5) **“Annual Report and Evaluation of ESCO”**

**INTERVAL:** Annually. Two step report. The ESCO submits the “Annual Summary Report” that summarizes what the ESCO did during the past 12 months. The Installation compares the ESCO’s report to the contract requirement and submits an Evaluation of the ESCO’s performance to the Contracting Officer.

Procedural Guidance # 2M
  - 6) **“Annual Energy Management Data Report”**

**INTERVAL:** Annually. Submitted to higher headquarters on all of the active ESPCs being performed on the Installation.

## Procedural Guidance # 12

### **6-2. Frequently Requested Information**

The following data is typically requested and should be maintained in a separate database, and not just in the individual project file to make future reporting easier:

- **Location** – Installation name, state, POC, phone number, & email
- **Contract Vehicle used** – Identify ID/IQ contract used, or site-specific contract
- **ESCO name** – Company name (legal name, Federal ID #, POC, address, phone #, & email)
- **Project Facilitator** – Identify who performed this role and what organization they worked for.
- **Task Order award date** – Award date of Task Order (contract award date if not ID/IQ)
- **Project Acceptance date** – Date construction is complete and project has been accepted. Acceptance begins performance period and payments begin.
- **Task Order (or separate contract) termination date** – Date of delivery/task order (or separate contract) completion or early termination (buyout)
- **Technologies implemented** – General list of technologies implemented
- **ESCO investment** – Present Value of the dollars the ESCO invests
- **Contract length** – Total contract length (in years), including construction period
- **Scheduled payments** – Total of regularly scheduled contract payments during reporting period
- **Non-scheduled payments** – Total of extra, early, or non-scheduled contract payments during reporting period
- **Annual savings** – Savings (\$, MMBtus and emissions) during reporting year
- **ESCO/Government split of savings** – Percent split of savings between ESCO and government
- **Life cycle savings** – Total savings over life on task order (or separate contract)
- **Buyout** – Was Task Order (or separate contract) bought out during the reporting period?
- **Measurement & Verification methods used** – How are savings measured and verified?

- **Barriers to increased use & recommendations** – What barriers were noted that limit/prevent further use of ESPC contracts, and any recommendations for removing them
- **Uses of government share of savings** – How the government used its portion of the savings
- **Level of satisfaction with ESCO** – How satisfied is the Installation with the performance of ESCO during reporting period
- **Special or Unusual events, or Circumstances** – An example of this could be a change in scope (additions or deletions), change in mission, change in pricing (rate changes) that would ultimately require a change in the baseline.

Page intentionally blank



## List of Acronyms

AAA	Army Audit Agency
ACC	Army Contracting Command
ACO	Administrative Contracting Officer
ACSIM	see OACSIM
AEMR	Annual Energy Management Report
AET	Army Energy Team
AEQMB	Army Energy Quality Management Board
AEWRS	Army Energy and Water Reporting System
ASA	Assistant Secretary of the Army
AWC	Area Wide Contract
BRAC	Base Realignment & Closure (Act)
CEHNC	US Army Engineering & Support Center - Huntsville, AL
CERL	US Army Corps of Engineer - Construction Engineering Research Laboratory
CFR	Code of Federal Regulations
CO	Contracting Officer
COR	Contracting Officer's Representative
CONUS	Continental United States
DA	Department of the Army
DOC	Director/Directorate of Contracting
DES	Detail Energy Survey
DESC	Defense Energy Support Center
DFARS	Defense Federal Acquisition Regulations
DLA	Defense Logistics Agency
DOD	Department of Defense
DOE	Department of Energy
DPW	Director/Directorate of Public Works
ECIP	Energy Conservation Investment Program
ECM	Energy Conservation Measure
EEAP	Energy Engineering Analyses Program
EO	Executive Order
EPACT	Energy Policy Act
ESCO	Energy Service Company
ESPC	Energy Savings Performance Contract
FAC	Federal Acquisition Circular
FAR	Federal Acquisition Regulation
FEMP	Federal Energy Management Program
FEDS	Federal Energy Decision Screening
FPP	Financing Procurement Price

## **List of Acronyms (continued)**

FY	Fiscal Year
G&A	General & Administrative (expenses)
GSA	General Services Administration
HQ	Headquarters
HQDA	Headquarters - Department of the Army
HQUSACE	Headquarters – Corps of Engineers
I&E	Installations & Environment
IAG	Interagency Agreement
IAW	In Accordance With
ID/IQ	Indefinite Delivery/Indefinite Quantity
IDS	Investor Deal Summary
IMCOM	Installation Management Command (formerly IMA)
IP	Implementation Price (formerly used for Initial Proposal under old DOE Super ESPC ID/IQ)
IPMVP	International Performance Measurement and Verification Protocol
IPR	In-Process Review
ISSA	Inter-Service Support Agreement
J&A	Justification & Approval (process)
M&V	Measurement & Verification
MCA	Military Construction, Army
MILCON	Military Construction
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
NECPA	National Energy Conservation Policy Act
NTP	Notice to Proceed
O&M	Operations & Maintenance
OACSIM	Office of the Assistant Chief of Staff for Installation Management
OMB	Office of Management and Budget
OCONUS	Outside Continental United States
P4	Pre-Performance Period Payments
PA	Preliminary Assessment
PF	Project Facilitator
PIP	Process Improvement Plan
PL	Public Law
POC	Point of Contact

## **List of Acronyms (continued)**

R&R	Roles & Responsibilities (also repair and replacement)
RCI	Residential Communities Initiative
RFP	Request for Proposal
RM	Resource Manager
SIN	Special Item Number
SOW	Scope of Work
TO	Task Order
UESC	Utility Energy Services Contract
USACE	United States Army Corps of Engineers
USAR	United States Army Reserves
USC	United States Code

Page intentionally blank

# ATTACHMENTS

PROCEDURAL GUIDANCE

Page intentionally blank

## PROCEDURAL GUIDANCE INDEX

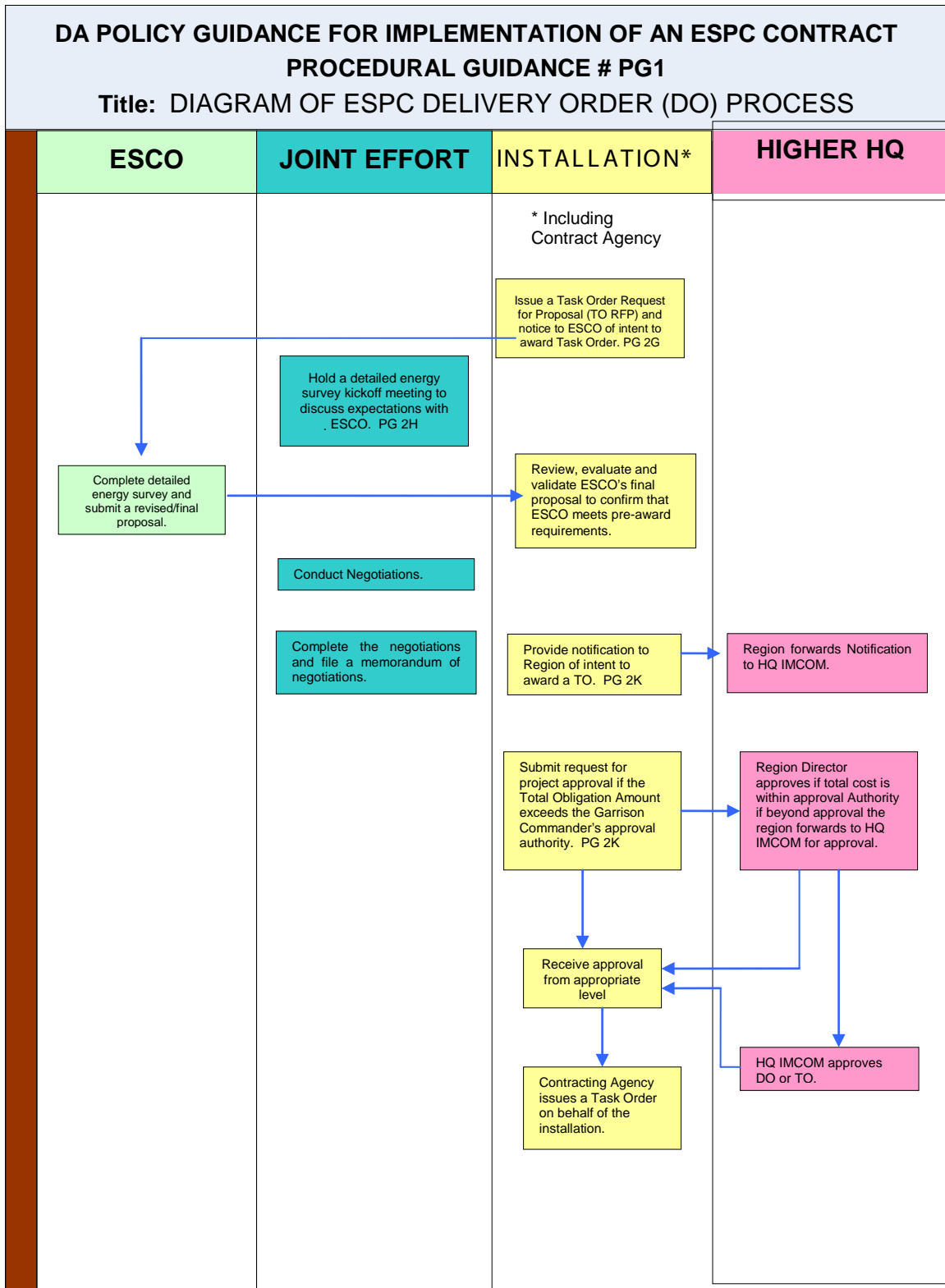
### **FORWARD**

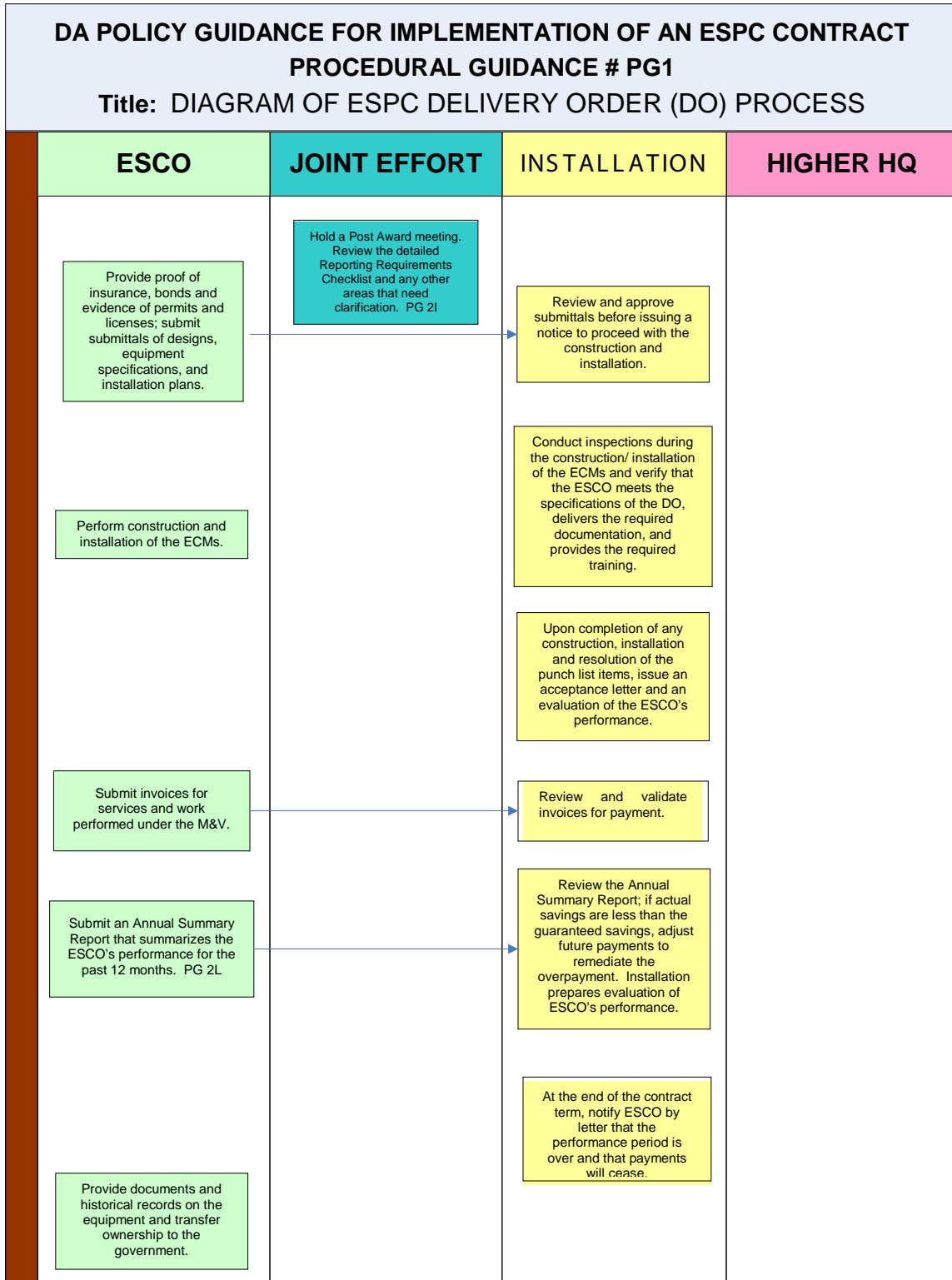
The following procedural guidance is provided to clarify the complex tasks and to assist Army activities in implementing ESPC contracts in accordance with Army ESPC policy and other relevant guidance. OACSIM may update the procedural guidance, in whole or in part, and will annotate the date of the latest update in the "Last Update" column.

<b>PROCEDURAL GUIDANCE (PG) TITLE/SUBTITLE</b>	<b>LAST UPDATE</b>	<b># PAGES</b>
PG # 1 - DIAGRAM OF ESPC TASK ORDER (TO) PROCESS		2
PG # 2 - STANDARD CHECKLIST FOR IMPLEMENTING A TASK ORDER (TO) AGAINST AN EXISTING ESPC ID/IQ CONTRACT		9
A. NOTIFICATION OF INTENT TO PURSUE AN ESPC PROJECT TASK ORDER		3
B. INITIAL PROPOSAL KICKOFF MEETING	Mar 2008	2
C. DISCUSSION OF KEY ITEMS	Mar 2008	4
D. DEVELOPMENT OF MEASUREMENT AND VERIFICATION (M&V)		4
E. REVIEW OF ESCO'S INITIAL PROPOSAL		3
F. RISK/RESPONSIBILITY MATRIX	Mar 2008	5
G. NOTICE TO ESCO OF INTENT TO AWARD TASK ORDER		1
H. DETAILED ENERGY SURVEY KICKOFF MEETING		2
I. SAMPLE ESPC REPORTING REQUIREMENT CHECKLIST		1
J. NOTIFICATION TO OACSIM OF INTENT TO AWARD DELIVERY ORDER		2
K. APPROVAL OF ESPC DELIVERY ORDER OR TASK ORDER		2
L. M&V PLAN AND SAVINGS CALCULATION METHODS OUTLINE		10
M. ANNUAL REPORT OUTLINE		7
N. POST-INSTALLATION REPORT OUTLINE		8

<b>PROCEDURAL GUIDANCE (PG) TITLE/SUBTITLE</b>	<b>LAST UPDATE</b>	<b># PAGES</b>
PG # 3 - EXISTING ID/IQ CONTRACTS A. CORPS OF ENGINEERS B. DOE ID/IQ CONTRACT C. GSA SCHEDULE GUIDE		4 6 11
PG # 4 – SAVINGS CALCULATIONS TEMPLATES		9
PG # 5 – COMPETITIVE PRICING PROCEDURES		1
PG # 6 - STANDARD FORMAT SURVEILLANCE PLANS		2
PG # 7 - CASH FLOW GUIDE		2
PG # 8 - FINANCING CONTRACT TEMPLATE		2
PG # 9 - CONTRACTING PROCEDURES FOR UNSOLICITED PROPOSALS FROM PREQUALIFIED ESPC CONTRACTORS		2
PG # 10 - CONTRACTING PROCEDURES FOR DIRECT NEGOTIATIONS WITH ESPC CONTRACTORS COMPETITIVELY SELECTED BY UTILITY COMPANIES		2
PG # 11 COMPETITIVE NEW CONTRACT PROCESS		1
PG # 12 - ARMY ENERGY MANAGEMENT REPORT		1
PG # 13 - FORM FOR COMMENTS		2







## **PROCEDURAL GUIDANCE 2**

### **Standard Checklist for Implementing a Task Order Against an Existing ESPC ID/IQ Contract**

The Appendices provides guidance, sample documentation, and reference to information for clarification of the task to be performed (unless otherwise noted). However, the tasks listed in the **CHECKLIST** are tasks that must be performed when implementing an ESPC Task Order (TO). The date the task is completed must be documented on the **CHECKLIST** and the **CHECKLIST** will be maintained with the ESPC package for auditing purposes. New competitive competed ESPC ID/IQ contracts are required to use this **CHECKLIST**. The tasks do not necessarily need to be completed in the order listed.

Additional tasks may be added to the **CHECKLIST**, as the Installation deems necessary. Tasks on the **CHECKLIST** that are not applicable will be annotated NA on the **CHECKLIST**.

Page intentionally blank

**INITIATING, AWARDING, AND CLOSURE**

<p>1) Garrison Commander has established and maintains an active Energy and Water Management Program (EWMP) with adequate staff to manage all of the Installation's energy and water management matters.</p>	<p>Date: _____ Initials: _____</p>
<p>2) The Energy and Water Management staff may talk with various ESPC contracting agencies or just one to explore opportunities.</p>	<p>Date: _____ Initials: _____</p>
<p>3) If potential opportunities are identified, an ESPC Program Manager will be designated to coordinate the process of awarding an ESPC TO. The designated coordinator should be trained on ESPC per the <i>EPACT</i> 1992 and have a thorough understanding of the ESPC process</p>	<p>Date: _____ Initials: _____</p>
<p>4) The ESPC Program Manager will assemble an acquisition team and ensure the team has been trained on the ESPC process and is involved in the following processes:</p>	<p>Date: _____ Initials: _____</p>
<p>a. Conducting a needs assessment to include an Installation initial screening test</p>	<p>Date: _____ Initials: _____</p>
<p>b. Reviewing the project alternatives</p>	<p>Date: _____ Initials: _____</p>
<p>c. Selecting financing methods</p>	<p>Date: _____ Initials: _____</p>

**INITIATING, AWARDING, AND CLOSURE**

<p>d. Selecting contract methods and contracting agency.</p>	<p>Date: _____ Initials: _____</p>
<p>e. Selecting the ESCO</p>	<p>Date: _____ Initials: _____</p>
<p>f. Reviewing the Installation’s Energy and Water Management Plan to ensure the ESPC supports the Installation’s plan.</p>	<p>Date: _____ Initials: _____</p>
<p>g. Determine the need for technical assistance.</p>	<p>Date: _____ Initials: _____</p>
<p>h. Select a Project Facilitator and ensure they are approved by either OACSIM or DoE.</p>	<p>Date: _____ Initials: _____</p>
<p>5) Review DOE’s “Practical Guide to Savings and Payments in Super ESPC Task Orders” to freshen up on fundamental concepts in performance contracting, allowable savings and sources of payments, ESPC cost savings – Sources and Examples, and financial administration and accounting for Super ESPC projects <a href="http://www1.eere.energy.gov/femp/financing/superespcs_espcbasics.html">http://www1.eere.energy.gov/femp/financing/superespcs_espcbasics.html</a></p>	<p>Date: _____ Initials: _____</p>

**INITIATING, AWARDING, AND CLOSURE**

<p>6) Execute the necessary MOAs, MOUs, ISSAs, and SOWs with supporting agencies.</p>	<p>Date: _____ Initials: _____</p>
<p>7) Conduct an Initial Kickoff Meeting with selected ESCO (Procedural Guidance 2B)</p>	<p>Date: _____ Initials: _____</p>
<p>8) Discuss key items (Procedural Guidance 2C)</p>	<p>Date: _____ Initials: _____</p>
<p>9) Develop a Task Order Request for Proposal (TO RFP) that provides the ESCO with Installation and site-specific requirements, terms, and conditions for each delivery order.  (DOE SAMPLE at <a href="http://www1.eere.energy.gov/femp/financing/superespcs_espbasics.html">http://www1.eere.energy.gov/femp/financing/superespcs_espbasics.html</a>)</p>	<p>Date: _____ Initials: _____</p>
<p>10) Develop a Measurement and Verification (M&amp;V) Plan (Procedural Guidance 2D). The M&amp;V Plan is critical to the process and the M&amp;V template in Procedural Guidance # 4 must be used to the fullest without changes. Also check the IPMVP at: <a href="http://www.ipmvp.org/">http://www.ipmvp.org/</a></p>	<p>Date: _____ Initials: _____</p>
<p>11) ESCO provides report on preliminary Site Survey</p>	<p>Date: _____ Initials: _____</p>
<p>12) Notify Region/HQ IMCOM of intent to pursue an ESPC project. (Procedural Guidance 2A)</p>	<p>Date: _____ Initials: _____</p>

**INITIATING, AWARDING, AND CLOSURE**

13) Review the ESCO's Initial Proposal (Procedural Guidance 2E)	Date: _____ Initials: _____
14) Cross check the inter-operability of the proposed maintenance system to the Installation's maintenance system.	Date: _____ Initials: _____
15) Installation develops a Risk/Responsibility matrix to help in the decision process to go forward with a TO. (Procedural Guidance 2F)	Date: _____ Initials: _____
16) Issue a TO RFP and file a notice to the ESCO of intent to award a delivery order (Procedural Guidance 2G)	Date: _____ Initials: _____
17) Conduct Detailed Energy Survey Kickoff meeting (Procedural Guidance 2H)	Date: _____ Initials: _____
18) ESCO provides Detailed Energy Survey	Date: _____ Initials: _____
19) ESCO provides revised/final proposal	Date: _____ Initials: _____



**INITIATING, AWARDING, AND CLOSURE**

<p>20) ESCO and Installation jointly develop a detail ESPC Reporting Requirement Checklist with a requirement description, frequency, time line, # copies, and identifies who receives the report. (Procedural Guidance 2I)</p>	<p>Date: _____ Initials: _____</p>
<p>21) Installation reviews, evaluates and validates ESCO's final proposal to include validation of baseline. (Procedural Guidance 2E)</p>	<p>Date: _____ Initials: _____</p>
<p>22) Preliminary negotiations are conducted and jointly the Installation and ECSO confirms that the ESCO meets pre-award requirements. Final negotiations are documented with a Negotiation Memo. Evidence of ESCO being able to obtain bonds, financing, and insurance is provided prior to award of contract.</p>	<p>Date: _____ Initials: _____</p>
<p>23) Request for approval if the Total Obligation Amount (the amount to repay the ESCO plus interest payments for the term of the contract) exceeds the Garrison Commander's approval authority.</p>	<p>Date: _____ Initials: _____</p>
<p>a. For ESPC projects \$3M or less, request is sent to IMCOM – Region Director for approval.</p>	<p>Date: _____ Initials: _____</p>
<p>b. For ESPC projects greater than \$3M, the request is sent to HQ IMCOM for approval. (Procedural Guidance 2K)</p>	<p>Date: _____ Initials: _____</p>
<p>23) Upon approval from Garrison Commander or higher headquarters the contracting agency issues a Task Order</p>	<p>Date: _____ Initials: _____</p>

**INITIATING, AWARDING, AND CLOSURE**

<p>24) Notification to OACSIM of intent to award a Task Order (Procedural Guidance 2J)</p>	<p>Date: _____ Initials: _____</p>
<p>25) Hold a Post Award meeting with ESCO and review the detailed Reporting Requirement Checklist developed during the negotiations phase. (Procedural Guidance 2I)</p>	<p>Date: _____ Initials: _____</p>
<p>26) ESCO provides proof of insurance and submittals of designs, equipment specifications, and Installation plans along with evidence of permits and licenses.</p>	<p>Date: _____ Initials: _____</p>
<p>27) Installation reviews and approves the submittals before issuing a notice to proceed with the construction/Installation.</p>	<p>Date: _____ Initials: _____</p>
<p>28) Installation conducts inspections during the construction/installation of the ECMs and verifies that the ESCO meets the specifications of TO, delivers the required documentation, and provides the required training.</p>	<p>Date: _____ Initials: _____</p>
<p>29) Upon completion of the construction/installation and resolution of the punch list, the Installation issues an acceptance letter.</p>	<p>Date: _____ Initials: _____</p>
<p>30) After the Installation accepts the project the ESCO may submit invoices for payment. The Installation is responsible for verifying that the invoices contain any required M&amp;V documentation before initiating payments.</p>	<p>Date: _____ Initials: _____</p>

**INITIATING, AWARDING, AND CLOSURE**

<p>31) The ESCO also provides services as specified in the delivery order during the term of the contract and the Installation must verify that the ESCO is delivering the negotiated services.</p>	<p>Date: _____ Initials: _____</p>
<p>32) On the anniversary date of the TO award the Installation must file an Annual Summary Report that summarizes the ESCOs activities for the past 12 months. The report includes verification of performance, operations, and maintenance activities. (Procedural Guidance 2L)</p>	<p>Date: _____ Initials: _____</p>
<p>33) In addition to verifying that the ESCO provides the necessary documents and services the Installation must develop and carry out a surveillance and evaluation program to monitor the effectiveness of the ESCO's performance. Installations must complete an evaluation at the end of the construction/installation phase, annually thereafter (the Annual Summary Report should support the ESCO evaluation), and at contract termination.</p>	<p>Date: _____ Initials: _____</p>
<p>34) The M&amp;V plan established the intervals at which specified measurements and monitoring occur and the documentation required for periodic performance verifications. This documentation is used to verify that the ESCO has delivered the guaranteed level of cost savings over the year. If the actual savings are less than guaranteed savings, the government must reduce (or discontinue) future payments until the overpayment is resolved.</p>	<p>Date: _____ Initials: _____</p>
<p>35) At the end of the contract term the contracting agency notifies the ESCO by letter that the performance period is over and payments will cease.</p>	<p>Date: _____ Initials: _____</p>

---

Page intentionally blank

## **PROCEDURAL GUIDANCE 2A NOTICE OF INTENT TO PURSUE AN ESPC PROJECT, TASK ORDER**

A considerable amount of time and resources are expended by Army activities and the ESCOs in the identification and development of energy savings projects. Often their efforts result in the award of a multi-million dollar contract. However, their efforts do not always result in the award of a contract.

As part of the oversight of the ESPC Program, OACSIM requests that all Army activities submit a "Notice of Intent to Pursue an ESPC Project TO". **This notice must be submitted to OACSIM, through higher headquarters, once the Installation receives the Initial Proposal, but not less than 30 days prior to accepting the Initial Proposal.** By tracking ESPC TOs from inception, OACSIM is provided insight on future awards and they can enhance the ESPC process by analyzing the ones that did not result in an award.

### SAMPLE OF NOTICE OF INTENT TO PURSUE Installation Letter Head

OFFICE SYMBOL

Date

MEMORANDUM THRU

Your Region Engineer Office, ATTN: Region ESPC Program Manager

Headquarters, Installation Management Command, ATTN: IMPW-E, 2511 Jefferson Davis Highway, Arlington, VA 22202-3926

FOR Department of Army, Assistant Chief of Staff for Installation Management (ACSIM) ATTN: DAIM-ODF, Presidential Towers, 2511 Jefferson Davis Highway, Arlington, VA 22202

SUBJECT: Notice of Intent to Pursue Issuance of a Task Order against an ESPC Contract

1. The purpose of this memorandum is to notify higher headquarters that we are pursuing the award of an ESPC Task Order with (Name of the ESCO).
2. We are in the (initial kickoff meeting, initial proposal, development of Request for Proposal, etc...) phase of the project. The attached data sheet

provides preliminary information about the project and projected values we have at this time.

3. Point of contact for this action is Mr. John Doe, (703) 555-4531, email john.doe@us.army.mil.

Encl

COL R. U. Sure  
Garrison Commander  
FORT XYZ

## **DATA SHEET FOR TASK ORDER BEING PURSUED**

**Location** – Installation Name and state

**Contract Vehicle used** – Identify ID/IQ contract used, or site-specific contract

**ESCO Name** – Company name, Point of Contact, Phone #, email

**Project Facilitator** – Name of individual servicing this role and what organization they represent.

**Discussion with ESCOs** – Was discussion held with several ESCOs or was the ESCO selection based on the ESCOs available on the ID/IQ contract?

**Projected date of award** – Estimated date of award

**Projected construction completion date** – Estimated date the construction period ends and the payment period begins

**Technologies to be implemented** – General list of technologies to be implemented

**ESCO investment** – ESCOs present cost of implementing the project

**Projected annual termination schedule** – Schedule of projected annual termination liability costs that the Army would incur if the Government decides to terminate the ESPC contract before the ESCO investment is completely amortized.

**Projected contract length** – Total contract length (in years) including construction period

**Projected annual savings** – Savings (\$, MMBtus and emissions)

**Projected life cycle savings** – Projected total savings over life of the delivery order

**Measurement and Verification Methods Used** – How will savings be measured and verified?

**Barriers to increased use & recommendations** – What barriers were noted that limit/prevent further use of ESPC contracts, and any recommendations for removing them

Page intentionally blank



# PROCEDURAL GUIDANCE 2B INITIAL PROPOSAL KICKOFF MEETING

## Sample Agenda

### Introductions/Roles

Roles of each person in the project

### Setting the Stage

Objectives of meeting

Discussion by Agency/Site on their interests, goals, objectives and priorities

Level of management support

Discussion by ESCO of their interest in the project

### Expectations –Technical and financial parameters

Discussion on scope, buildings, areas and ECMs to be considered

- Building environmental/performance requirements

- Long-term plans at the site-additional capacity, utilization

- Demolition, new construction

- Other studies, reports information available

- Simple payback, contract term, total investment parameters

- O&M services, R&R responsibilities and O&M savings

- Codes, regulations, hazards, other considerations/issues

- M&V/ Savings verification approach

- Energy and escalation rates, rebates, financial incentives

### Audit Process

ESCO discussion of plans for audit phase

- Logistics and access; testing/metering to be accomplished

- Security-restricted areas, escorts

- Safety requirements- training, hazards

Process discussion- reviews, drafts, etc

Requirements of Initial proposal; what does it look like (components/ what needs to be approved (ECM package, savings estimates, baseline, etc)

### Communications Protocols

Establish leads and discuss responsibilities for ESCO/Agency

- Establish frequency and method of communications (e-mails, conf calls)

### Project Timeline

- Schedule/timeline with significant milestones

## **Wrap-Up/Next Steps**

Recap of action items.  
Set next meeting or conference call time  
baseline, etc)

## **PROCEDURAL GUIDANCE 2C DISCUSSION OF KEY ITEMS (Clarifying Expectations)**

The following list of items is intended to be discussed at the start (kickoff meeting) of any single relationship between an Installation and an ESCO intending to propose on a project. It is meant to clarify the “expectations” of the two parties. The relationship would be as a selected ESCO following a site competition or as an ESCO given an approval to submit a contractor-identified initial proposal. This is meant to be a very open process and each party should disclose and be willing to discuss all pertinent topics. Success of the project depends upon open communications and a partnership approach.

### ***Site Goals***

A good place to start is with a discussion on the goals for the Installation, the site, and the project. What is most important to the Installation and the site – energy reduction, meeting Federal mandates, upgrading equipment, reducing maintenance, etc.?

### ***Project Boundaries***

The project is defined by several sets of guidelines or boundaries. These guidelines are usually guided by the willingness of the Installation to consider the type of project an ESCO is willing to propose. There are three primary boundaries; Potential project buildings and/or sites, potential energy conservation measures (ECM's) that may be considered, and simple payback ranges that the Installation is willing to consider.

#### **Project Buildings/Sites**

Both parties in the transaction need to agree on the buildings and/or sites that can or should be included in the project proposal.

#### **ECM's**

While the actual final ECM's will not be known at the time of the project development meeting, there are probably several opportunities that both parties are either expecting or desire to see in the proposal. ECM considerations might include aging infrastructure, new technology demonstrations, compatibility with other HVAC systems, a comprehensive approach, inclusion of renewables, etc.

#### **Simple Payback Ranges**

The use of the simple payback (measure installed cost divided by measure cost savings) as a determining factor in ESPC projects is a useful discussion item. EO 12902 states that agencies should install all measures with a simple payback of less than 10 years. It does not prohibit them from installing measures with over a 10-year simple payback. Measures, considered as a package, will probably have a maximum payback of around 10 years (repayment is generally around 2X simple payback). Since the concept has been used as a limiting factor for both contractors and agencies alike, the issue of simple payback should be discussed both in terms of individual ECM's and the comprehensive project proposal.

### ***Project Requirements/Limitations***

The project requirements and limitations are those issues that are relevant to any project regardless of the scope and buildings included in the proposal.

#### Contract Length

The contract length is often a comfort issue with the Installation. The acceptable range must be discussed prior to proposal development in order to ensure that an unacceptable proposal is not delivered after several months of work. Unnecessary limitations should be avoided if possible, as the project will decrease in scope and ECMs proposed if too restrictive. A 11-15 year repayment term is considered reasonable; longer repayment terms (16-25 years) may be needed for more "difficult" projects and shorter (5-10) year terms may be possible.

#### Amount of Investment

The amount of project investment (installed cost) is not limited in the ESPC contract, but is similar to those comfort issues often encountered in the simple payback arena. The first estimate of project size should be discussed in order to ensure that the proposed project cost will be acceptable to the Installation. Again, arbitrary restrictions should be avoided as it will limit the project scope. **Only the largest sites should consider breaking their potential projects into more than one delivery order.**

#### Operations and Maintenance Services

The potential scope should be discussed in terms of possible options for O&M on the installed measures and affected systems. The Installation may prefer complete O&M services provided by the Contractor, some level of shared O&M, or no Contractor performed O&M. Setting the expectation in advance will make the first proposal more accurate to the final project. It is OACSIM's policy that O&M should be performed by the contractor in all but the simplest cases.

## Operations and Maintenance Savings

If savings from operations and maintenance efficiencies (a legitimate source of savings under ESPC) are to be included in the project cost savings, this item should be discussed so the Contractor has a realistic feel for the amount of “true” cost savings that can be included in the project.

## Escalation

Several of the amounts in the DO may be escalated. Discussion should occur on whether savings should escalate over time due to projected utility cost increases or inflation of O&M savings. Another escalation point will be the service phase costs. If the intent of the Contractor is to escalate any of these costs in the initial or final proposal, discussions should occur and a preliminary escalation should show up in the initial proposal.

## Codes and Environmental Requirements

Often a project site may have certain codes or regulations in place that may have cost or feasibility impacts on potential ECM's. These issues can be discussed at the initial kickoff meeting based on an anticipated set of ECM's. If there are potential environmental concerns (asbestos, hazardous waste disposal) these should be discussed.

## Available Studies

The Contractor should be provided with all available previous studies or surveys so that the opinions and recommendations of other firms can be considered, and so that time will be saved in gathering pertinent information.

## ***Project Timeline***

The project timeline is not only the final construction schedule, but also the timeline expected for development of the proposal into a signed contract. The elements of this timeline are critical for efficient proposal review and setting of expectations for measurement of project development progress. The primary purpose is to keep the development of the proposal on track and always pointed at the best acceptable project for the Installation. Communication on a regular, consistent basis is a key to success.

## Contractor Milestones

The Contractor milestones are those items that they are committed to delivering either based on the ESPC proposal process or on internal plans

used by the Contractor to keep their proposal development process on track and aimed at the right target.

### Installation Milestones

The Installation milestones are those points in the proposal process where a general level of acceptability needs to be indicated to keep the proposal process on track. These points may include, management support for project scope and size, facility technical manager acceptance of potential project direction, and planned review times for interim reports on development of the proposal.

### Risk/Commitment Points

While no project is complete or a liability incurred until the final contract is signed, there are points in the process where risk is assumed or commitments are made. These points may include intent to award notification, indication of agreement of ECM's, etc. The impacts of changing attitudes and uncertain direction should be discussed to develop a common level of understanding of the importance of direct communication.

Each of these topics should be explored, but agreement doesn't need to be reached during the first meeting. It is expected that over the course of the project all of these items will be discussed and a conclusion that accommodates both parties' needs will be met.

# **PROCEDURAL GUIDANCE 2D DEVELOPING A MEASUREMENT AND VERIFICATION (M&V) APPROACH FOR A PROJECT**

## **Overview of M&V**

Measuring and verifying savings from performance contracting projects requires special project planning and engineering activities although best practices do exist. These practices are documented in several guidelines, including the International Performance Measurement & Verification Protocol (IPMVP 2005), FEMP M&V Guidelines: Measurement and Verification for Federal Energy Projects Version 2.2 (2000), and ASHRAE Guideline 14: Measurement of Energy and Demand Savings (2002). M&V is a critical part of the ESPC process and an abundance of information is available from the Lawrence Berkeley National Laboratory at <http://ateam.lbl.gov/mv> and from the IPMVP website at <http://www.ipmvp.org/>.

## **Role of Risk and Responsibility Matrix**

There are ESPC components that inherently specify how the risks associated with achieving estimated project cost savings are allocated between the Installation and the ESCO. These components are generally related to the contract financial terms and the M&V methods agreed upon to determine savings. Procedural Guidance 2F Risk Responsibility Matrix lists the primary factors that impact the determination of savings. It is critical that the Risk and Responsibility Matrix be filled out by both parties prior to the development of the M&V plan as allocation of responsibility will greatly affect the M&V planning process.

## **M&V Options A, B, C, and D**

The M&V protocol mandated for ESPC projects is the FEMP Guidelines: Measurement and Verification for Federal Energy Projects Version 2.2 (2000). These guidelines group M&V methodologies into four categories: Options A, B, C, and D. The options are generic M&V approaches for energy and water saving projects. Options A, B, C, and D are consistent with those defined in the IPMVP. Having four options provides a range of approaches to determine energy savings depending on the characteristics of the energy conservation measures (ECMs) being implemented and balancing accuracy in energy savings estimates with the cost of conducting M&V.

## Steps to Verify Savings

Regardless of the M&V guideline followed, similar steps are taken to verify the potential for the installed energy conservation measures (ECMs) to achieve savings. These steps include:

- Step 1: Verify the baseline conditions were accurately defined.
- Step 2: Develop a Project Specific Measurement & Verification Plan
- Step 3: Verify the proper equipment/systems were installed and are performing to specification.
- Step 4: Verify the equipment/systems continue to have the potential to achieve the predicted savings.

These four steps are discussed in detail below.

### Step 1: Define the Baseline

Typically the ESCO defines the baseline as part of the Detailed Energy Survey (DES). Baseline physical conditions (such as equipment inventory and conditions, occupancy, nameplate data, energy consumption rate, control strategies, and so on) are typically determined during the DES through surveys, inspections, spot measurements, and short-term metering activities. Baseline conditions are established for the purpose of calculating savings by comparing the baseline energy use to the post-installation energy use. Baseline data is also used to account for any changes that may occur during the period of performance, which may require baseline energy use adjustments. The baseline data is included in the ESCO's Final Proposal. **It is the Installation's responsibility to ensure that the baseline has been properly defined.** This data may include heating and cooling degree days, population counts, production counts, equipment loads, operating hours, etc.

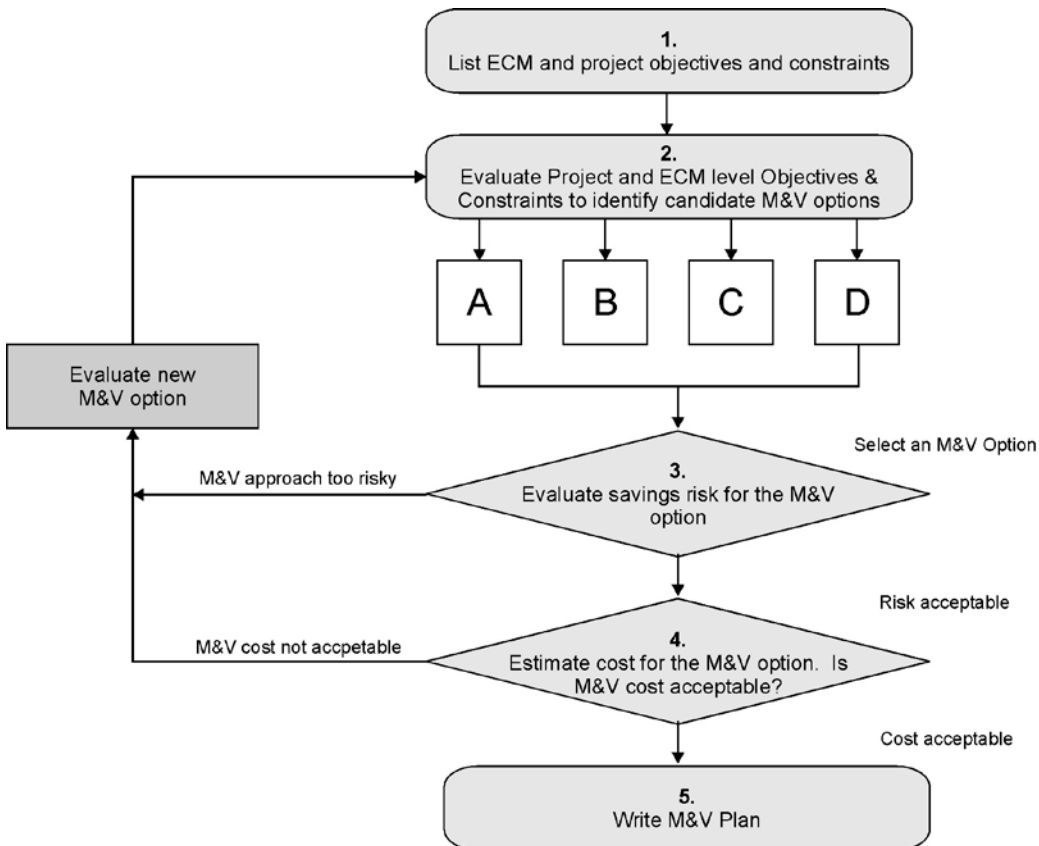
In almost all cases, once the energy conservation measure has been installed, one cannot go back and re-evaluate the baseline. It no longer exists! Therefore, **it is very important to properly define and document the baseline conditions.** Documentation must be retained for the duration of the contract. Deciding what needs to be monitored, and for how long, depends on factors such as the complexity of the measure and the stability of the baseline, including the variability of equipment loads and operating hours, and the other variables that affect the load. Adequate time for baseline establishment must be factored into the overall project schedule.

### Step 2: Develop a Project Specific Measurement & Verification Plan

**The M&V plan is the single most important item in an energy savings "guarantee."** Although the M&V plan is usually developed during contract



negotiations, it is important that the Installation and the ESCO agree upon general M&V approaches to be used prior to starting the DES. The M&V method(s) chosen can have a dramatic influence on how the baseline is defined, determining what activities are conducted during the audit. The following flowchart illustrates the process involved in the development of the M&V Plan. Details on how to employ the M&V Planning Tool including sample project and ECM level objectives and constraints are described in the M&V Planning Tool that can be downloaded from the M&V web site (<http://ateam.lbl.gov/mv>)



The project specific M&V plan includes project-wide items as well as details for each ECM, including:

- Details of baseline conditions and data collected
- Documentation of all assumptions and sources of data
- What will be verified
- Who will conduct the M&V activities
- Schedule for all M&V activities
- Details of engineering analysis performed
- How energy savings will be calculated
- Utility rates and how they will be used to calculate cost savings
- Detail any operations & maintenance (O&M) cost savings claimed

- Define O&M reporting responsibilities
- Define content and format of all M&V reports (Post-installation, Commissioning, and periodic M&V)
- How & why the baseline may be adjusted

**All ESPC projects must use the M&V plan outline** which can be found in Procedural Guidance 2L section.

### **Step 3: Post-Installation Verification**

Post-installation verification is conducted by both the ESCO and the Army Installation to ensure that proper equipment/systems were installed, are operating correctly, and have the potential to generate the predicted savings. The verification is accomplished through commissioning and M&V activities. Commissioning of installed equipment and systems is required. Commissioning assures that the building systems perform according to the design intent and specifications. Commissioning is generally completed by the ESCO and witnessed by the Installation. In some cases, however, it is contracted out to a third party.

After commissioning is completed, the post-installation measurement and verification activities specified in the M&V plan are implemented. Verification methods may include surveys, inspections, spot measurements, and short-term metering. The results of the commissioning and M&V activities are presented in a Post-Installation M&V Report delivered by the ESCO prior to final project acceptance.

All ESPC projects must use the Post-installation M&V Report outline, which can be found in Procedural Guidance 2N.

### **Step 4: Regular-Interval Verification During the Performance Period**

At least **annually**, the ESCO and the Army Installation must verify that the installed equipment/systems have been properly maintained, continue to operate correctly, and continue to have the potential to generate the predicted savings. Although an Annual M&V Report from the ESCO is required to substantiate savings guarantees, more frequent verification activities can be appropriate. This ensures that the M&V monitoring and reporting systems are working properly, it allows fine-tuning of measures throughout the year based on operational feedback, and avoids surprises at the end of the year.

**All ESPC projects must use the Annual Report outline, which can be found in Procedural Guidance 2M.**

## **PROCEDURAL GUIDANCE 2E INITIAL PROPOSAL REVIEW PROCESS FOR CONTRACTOR-IDENTIFIED PROJECTS**

Once the ESCO has received the go-ahead in writing from the contracting agency to submit a contractor-identified project (based on approval from the Installation) and conducted a preliminary energy survey, they will submit the proposal for review to the contracting agency, the Installation, and other involved individuals.

The Installation should take the following steps to prepare for a proposal review:

- a. Identify the Installation review team prior to receiving the proposal. The team should include the ESPC coordinator, Installation or third party technical person, the Garrison Commander, and other Installation people as necessary.
- b. Consider requesting the ESCO to provide any informal, preliminary information on the initial proposal content (perhaps just an early version of some/all of the TO schedules) for discussions before the written initial proposal is finalized. If mutually agreed, this step can improve the suitability of the initial proposal.
- c. Review the criteria to be used in evaluating the contractor-identified proposal:  
ECM Descriptions and Projected Energy Savings
- d. Degree to which the ECM package is reasonable, acceptable, comprehensive, and provides a solution to government needs.
- e. Reasonableness of energy and O&M savings and adequacy of supporting assumptions and analysis:
  - Measurement and Verification - Is it reasonable and appropriate?
  - Risk/Responsibility Matrix – Are the government and ESCO risks and responsibilities clearly described and allocated? Are they appropriate?
  - Price reasonableness considerations. An independent quote on capital costs should be obtained.
- f. Estimated annual cost savings on Schedule. TO-1 (initial) is substantiated in the technical proposal and is reasonable and consistent with the technical approach
- g. Service phase line item costs, term of contract, and total cost are reasonable and consistent with the technical approach (keep in mind that the ESCO will use estimates for the initial proposal)

Criteria in d, e, and f should weigh more heavily than the lowest price.

Once the written initial proposal is submitted, conversation with the ESCO should not lead to changing their proposal. The initial proposal should remain intact while deciding whether to move forward. If the contractor gives a presentation, make sure questions and clarifications are specific to the proposal. It is unfair to the contractor at this point to suggest changes to scope, technologies, etc.

The government has 60 days to review the proposal but should attempt to complete the review as soon as possible. Once technical and price reviews are completed, determine whether to proceed with the proposal:

- a. Does this project proposal meet the Installation's needs?
- b. Is this an appropriate project to pursue under a performance contract?
- c. Is this a reasonable technical and financial deal for the Government?
- d. Is this a contractor with whom you can have a good long-term working relationship?
- e. Does the contractor have the special capabilities for items considered distinct or unique?

If the answers are "Yes", then it is justified and expected that the Installation will continue on a single-source path with the ESCO. The contracting officer should write a brief justification to record the decision. Remember that the proposal will not be perfect at this stage, but it should provide the "core" parameters expected in the final package. In general, initial proposal questions and comments should be directed towards a resolution in the Detail Energy Survey (DES) and final proposal, and not require additional iterations of the initial proposal.

It may also be unclear whether this is a project with which the Installation wants to move forward. There may be issues to resolve internally before reaching a conclusion. Perhaps the proposal would be acceptable with some alterations, and perhaps some issues need to be addressed early in the DES stage (the ESCO's next step). In some cases, revising TO schedules may be required before moving to the DES. In general, the idea is to move forward with the existing proposal and comments into the DES, since a more detailed final proposal is generated at the conclusion of that stage.

If serious flaws are identified and need to be corrected before the project can be considered, the Installation may reject the first submission and give the ESCO one opportunity to resubmit. Again, the time limit to make the decision is 60 days from time of receipt. Communicate with the contracting officer during this period to keep him/her up to date.

If the contracting officer determines the proposal is acceptable and wishes to proceed, the next step will be to assemble a Request for Proposal (RFP) defining the Installation specific terms and conditions. Once completed, the RFP will be forwarded to the ESCO with a "Notice to ESCO of Intent to Award a Task Order" letter. This allows the ESCO to proceed to the DES phase.

**Keep in mind that both the technical and price proposals will be further refined during the DES phase, and that technical and price elements are negotiable throughout the process.**

The cost for the initial proposal and the Detailed Energy Survey (DES) are borne by the ESCO whether or not the Government accepts or rejects the Energy Conservation Measures (ECMs).

## **ADDITIONAL M&V and PRICING CHECKS**

### **Checklist for M&V Approach**

- Project site and measures are reasonably defined.  
What savings will be claimed? (energy, interactive effects, O&M...)
- b. M&V option (A, B, C, and D from *FEMP M&V Guidelines*) is defined for each measure.
- c. Baseline Equipment and Conditions (plan only).
  1. Plan for defining existing equipment (inventory and performance) is described.
  2. Plan for defining space conditions (foot-candles, temps, etc.) is described.
  3. How and why baseline adjustments will be made is discussed.
- d. Post-Installation Equipment and Conditions (plan only).
  1. Plan for defining new equipment (inventory and performance) is described.
  2. Plan for defining space conditions (foot-candles, temps, etc.) is described.
- e. Annual Measurement and Verification activities are mentioned.
  1. Who will conduct the M&V activities?
  2. Who will prepare M&V analyses and describe all documentation?

### **Pricing Checks**

- a. Mark-up and financing are within maximums.
- b. Ensure payments to the ESCO are equal to or less than savings (net gain to government).
- c. Ask the Project Facilitator or energy manager about benchmark ranges for direct costs of common ECMs such as lighting, variable speed drives, and chillers. This is a rough check at this stage, and the final proposal will contain more direct cost information for evaluation and negotiation.

Page intentionally blank

## PROCEDURAL GUIDANCE 2F ESPC Contract Risk/Responsibility Matrix

1. RESPONSIBILITY/DESCRIPTION	ESCO PROPOSED APPROACH	INSTALLATION/ CONTRACT AGY ASSESSMENT
<b>1. Financial</b>		
<b>a. Interest rates:</b> During all phases of the project, interest rates will change with market conditions. Higher interest rates will increase project cost, financing/project term, or both. The timing of the Contract / Task Order signing may impact the available interest rate and project cost.		
<b>b. Energy prices:</b> For calculating savings, the value of the saved energy may be constant, change at a fixed inflation rate, or float with market conditions. If the value changes with the market, falling energy prices place the Contractor at risk of failing to meet cost savings guarantees. If energy prices rise, there is a small risk to the Installation that energy saving goals might not be met while the financial goals are. If the value of saved energy is fixed (either constant or escalated), the Installation risks making payments in excess of actual energy cost savings. <b>Clarify how future energy costs will be treated.</b>		
<b>c. Construction costs:</b> The Contractor is responsible for determining construction costs and defining a budget. In a fixed-price design/build Contract, the Installation assumes little responsibility for cost overruns. However, if construction estimates are significantly greater than originally assumed, the Contractor may find that the project or measure is no longer viable and drop it before Contract award. In any design/build Contract, the Installation loses some design control. <b>Clarify design standards and the design approval process (including changes) and how costs will be reviewed.</b>		
<b>d. M &amp; V costs:</b> The Installation assumes the financial responsibility for M & V costs directly or through the Contractor. <b>Clarify how project savings are being verified (e.g., equipment performance, operational factors, energy use) and the impact on M&amp;V costs.</b>		

<p><b>e. Non-Energy Cost Savings:</b> The Installation and the ESCO may agree that the project will include savings from <i>recurring</i> and/or <i>one-time</i> costs. This may include one-time savings from avoided expenditures for projects that were appropriated but will no longer be necessary. Including one-time cost savings before the money has been appropriated entails some risk to the Installation. Recurring savings generally result from reduced O&amp;M expenses or reduced water consumption. These O&amp;M and water savings must be based on actual spending reductions. <b>Clarify sources of non-energy cost savings and how they will be verified.</b></p>		
<p><b>f. Delays:</b> Both the Contractor and the Installation can cause delays. Failure to implement a viable project in a timely manner costs the Installation in the form of lost savings, and can add cost to the project (e.g. construction interest, re-mobilization). <b>Clarify schedule and how delays will be handled.</b></p>		
<p><b>g. Major changes in facility:</b> The Installation (or Congress) controls major changes in facility use, including closure. <b>Clarify responsibilities in the event of a premature facility closure, loss of funding, or other major change.</b></p>		
<p><b>2. Operational</b></p>		
<p><b>a. Operating hours:</b> The Installation generally has control over operating hours. Increases and decreases in operating hours can show up as increases or decreases in “savings” depending on the M&amp;V method (e.g., operating hours multiplied by improved efficiency of equipment vs. whole-building/utility bill analysis). <b>Clarify whether operating hours are to be measured or stipulated and what the impact will be if they change.</b> If the operating hours are stipulated, the baseline should be carefully documented and agreed to by both parties.</p>		
<p><b>b. Load:</b> Equipment loads can change over time. The Installation generally has control over hours of operation, conditioned floor area, intensity of use (e.g. changes in occupancy or level of automation). Changes in load can show up as increases or decreases in “savings” depending on the M &amp; V method. <b>Clarify what equipment loads are to be measured and what the impact will be if they change.</b> If any equipment loads are stipulated, the baseline should be carefully documented and agreed to by both parties.</p>		



<p><b>c. Weather:</b> A number of energy efficiency measures are affected by weather. Changes in weather can increase or decrease “savings” depending on the M&amp;V method (e.g. equipment run hours multiplied by efficiency improvement vs. whole-building/utility bill analysis). If weather is “normalized,” actual savings could be less than payments for a given year, but will average out over the long run. All weather data should be normalized. <b>Clearly specify how weather corrections will be performed.</b></p>		
<p><b>d. User participation:</b> Many energy conservation measures require user participation to generate savings (e.g., control settings). The savings can be variable and the Contractor may be unwilling to invest in these measures. <b>Clarify what degree of user participation is needed and utilize monitoring and training to mitigate risk.</b> If performance is stipulated, document and review assumptions carefully and consider M&amp;V to confirm the capability to save (e.g., confirm that the controls are functioning properly).</p>		
<p><b>3. Performance</b></p>		
<p><b>a. Equipment performance:</b> The Contractor has control over the selection of equipment and is responsible for its proper installation, commissioning, and performance. The Contractor has responsibility to demonstrate that the new improvements meet expected performance levels including specified equipment capacity, standards of service, and efficiency. <b>Clarify who is responsible for initial and long-term performance, how it will be verified, and what will be done if performance does not meet expectations.</b></p>		
<p><b>b. Operations:</b> Responsibility for operations is negotiable, and it can impact performance. <b>Clarify responsibility for operations, the implications of equipment control, how changes in operating procedures will be handled, and how proper operations will be assured.</b></p>		
<p><b>c. Maintenance:</b> Responsibility for maintenance is negotiable, and it can impact performance. Clarify how long-term preventive maintenance will be assured, especially if the party responsible for long-term performance is not responsible for maintenance (e.g., Contractor provides maintenance checklist and reporting frequency). <b>Clarify who is responsible for long-term preventive maintenance to maintain operational performance throughout the Contract term. Clarify what will be done if inadequate preventive maintenance impacts performance.</b></p>		

<p><b>d. Equipment Repair and Replacement:</b> Responsibility for repair and replacement of Contractor-installed equipment is negotiable, however it is often tied to project performance. <b>Clarify who is responsible for replacement of failed components or equipment throughout the term of the Contract.</b> Specifically address potential impacts on performance due to equipment failure. Specify expected equipment life and warranties for all installed equipment. Discuss replacement responsibility when equipment life is shorter than the term of the Contract. <b>Clarify what will be done if inadequate repair or replacement impact performance.</b></p>		
---	--	--

## **PROCEDURAL GUIDANCE 2G NOTICE TO ESCO OF INTENT TO AWARD TASK ORDER**

[Name of ESCO]  
[Address of ESCO]

SUBJECT: [contract number; project description]

Dear [ESCO]:

We are pleased to inform you that you have been selected to provide energy savings performance contract services for [INSTALLATION NAME]. This notice of intent to award a task order against your ID/IQ contract, however, is subject to your successful satisfaction of the Pre-Award Requirements contained in Section XXX of your award. Specifically, within \_\_\_\_ days of this notice, you are required to perform a Detailed Energy Survey of the applicable project site facilities and energy systems, and provide a final proposal summarizing the survey results to the undersigned Contracting Officer. The survey shall be conducted in accordance with the requirements of Section XXX of your contract. The final proposal and schedules submitted must verify the accuracy of the estimated annual cost savings you originally proposed for this project. If they do not, the Pre-Award Requirements of Section H.26 will not be considered to have been met, and negotiations and award will not be pursued further.

Upon receipt of the final proposal and its Task Order schedules, the Government will notify you when negotiations may commence. We reminded you to take necessary actions to obtain the required financing and bonding (if required) for this project, as required by Section H.26 of your contract. These pre-award requirements will also require satisfaction once negotiations are completed and prior to issuance of the intended award.

Should you have any questions, please contact the Contracting Officer's Representative (COR), [name of COR] at (XXX) XXX-XXXX, or the undersigned Contracting Officer at (XXX) XXX-XXXX.

[Name]  
Contracting Officer

CF:  
HQ IMCOM  
IMCOM Region

Page intentionally blank

# PROCEDURAL GUIDANCE 2H DETAILED ENERGY SURVEY KICK-OFF MEETING

## *Sample Agenda*

### **Introductions/Roles**

Roles of each person in the project  
Objectives of meeting

### **Setting the Stage**

Discussion by Installation on their interests, goals, objectives and priorities  
Level of management support  
Discussion by ESCO of their interest in the project

### **Expectations/Feedback on Initial Proposal**

Feedback on selection (what Installation liked about proposal; why selected)  
ESCO comments on selection  
Discussion on scope, buildings, areas and ECMs to be considered  
    Building environmental/performance requirements  
    Long-term plans at the site-additional capacity, utilization  
    Demolition, new construction, studies, reports, information available  
    Review of initial proposal ECM's  
    Simple payback, contract term, total investment parameters  
    Annual termination schedule  
    O&M services, R&R responsibilities and O&M savings  
    Codes, regulations, hazards, other considerations/issues  
    M&V/ Savings verification approach  
    Energy and escalation rates, rebates, financial incentives  
    Other comments /feedback on initial proposal  
    Questions/answers on TO RFP documents or attachments

### **Detailed Energy Survey Process**

ESCO discussion of plans for DES phase  
    Logistics and access; testing/metering to be accomplished  
    Security-restricted areas, escorts  
    Safety requirements- Training, hazards  
Process discussion- reviews, drafts, etc  
Requirements of DES; what does it look like (components/ revised proposal) what needs to be approved (ECM package, savings estimates, baseline, M&V plan, etc)

### **Communications Protocols**

Establish leads and discuss responsibilities for ESCO/Installation  
Establish frequency and method of communications (e-mails, conf calls)

Project Timeline

Schedule/timeline with significant milestones to contract award

**Wrap-Up/Next Steps**

Recap of action items.

Set next meeting or conference call time

## PROCEDURAL GUIDANCE 21

### SAMPLE ESPC REPORTING REQUIREMENT CHECKLIST

Item	Deliverable	Frequency	Due	Recipient
1	Certificate of Insurance	One time	15 days after DO award	Contracting Officer (1 copy)
2	Performance Bond	One time	30 days after award of delivery order	Contracting Officer (1 copy)
3	Payment Bond	One time	30 days after DO award	Contracting Officer (1 copy)
4	Work Schedule	Monthly	10 days before work start	Contracting Officer (1 copy) COR (1 copy)
5	Work Outside Normal Hours	Per occurrence	5 days before work start	Contracting Officer (1 copy) COR (2 copies)
6	Design & Construction Package	One time	Due date based on final proposal and negotiations ____ days after TO award	Contracting Officer (1 copy) Agency COR (2 copies) DOE COR (2 copies)
7	ECM Installation Quality control Inspection Program	One time	With Item 6 above	Contracting Officer (1 copy) COR (2 copies)
8	Commissioning Plan	One time	After Approval of item 6 above	Contracting Officer (1 copy) COR (1 copy) DOE COR (1 copy)
9	Safety & Health Plan	One time	With Item 6 above	Contracting Officer (1 copy) COR (2 copies)
10	Notification of Utility Interruption	Per occurrence	15 working days prior to outage	Contracting Officer (1 copy) COR (2 copies)
11	Operation Work Procedure	One time	With training class	Contracting Officer (1 copy) COR (1 master for reproduction and 4 copies)
12	Maintenance Work Procedure	One time	With training class	Contracting Officer (1 copy) COR (1 master for reproduction & 4 copies)
13	O&M Manuals	One time	With training class	Contracting Officer (1 copy) COR (1 master for reproduction & 4 copies)
14	Commissioning Report	One time	Upon ECM installation and commissioning	Contracting Officer (1 copy) COR (1 copy) DOE COR (1/2)
15	Post-Installation Report	One time	30-60 days after project acceptance	Contracting Officer (1 copy) COR (1 copy) DOE COR (1/2)
16	As-built Drawings	Per ECM	Prior to Government's acceptance	Contracting Officer (1 copy) COR (2 copies)
17	Annual Report on ECM Performance	Annual	30 days after each year during performance period	Contracting Officer (1 copy) COR (1 copy) DOE COR (1 copy)

Page intentionally blank



## **PROCEDURAL GUIDANCE 2J NOTIFICATION TO OACSIM OF AWARD OF DELIVERY ORDER/TASK ORDER**

As the proponent for the Army ESPC Program, OACSIM has the responsibility to provide policy guidance, to maintain oversight of the program and to enhance the utilization and effectiveness of the program. In order to perform their responsibilities, OACSIM needs data from the field on their progress in implementing the ESPC Program. Army activities should provide a “Notification of Intent to Pursue an ESPC Task Order” and a “Notification of Award of an ESPC Task Order” to OACSIM for all ESPC delivery orders being pursued now, and for all future ESPC initiatives.

The “Notification of Award of an ESPC Task Order” must be submitted within 10 days after award. All notifications shall be routed through higher headquarters and include the following information:

- a. **Location** – Installation Name and state
- b. **Contract Vehicle used** – Identify ID/IQ contract used, or site-specific contract
- c. **ESCO Name** – Company name, Point of Contact, Phone #, email
- d. **Project Facilitator** – Identify name of Project Facilitator and their organization
- e. **Date of award** – Actual date of award
- f. **Total Contract Award Amount** – Total contract award value of ESPC (sum of contractor payments for debt repayment, M&V, and other negotiated performance period services)
- g. **Description/scope of the project** – Indicate boundaries and ESCO / Installation responsibilities. Clearly identify the overall responsibilities of the ESCO (operation, maintenance, etc).
- h. **Technologies to be implemented** – General list of technologies to be implemented
- i. **ESCO investment** – ESCOs present cost of implementing the project, amount privately financed under the ESPC and the finance cost
- j. **Contract length** – Total contract length (in years) including construction period
- k. **Projected annual savings** – Savings (\$, and MMBtus, and emissions) guaranteed cost savings relative to the baseline spending and how are they to be divided between the ESCO and the government
- l. **Projected life cycle savings** – Projected total savings over life of the delivery order. Include a comparison of the status quo life cycle cost (if the

government did not implement the TO) and the life cycle cost of implementing the TO.

**I. Measurement and Verification Methods Used** – How will savings be measured and verified?

**m. Barriers to increased use & recommendations** – What barriers were noted that limit/prevent further use of ESPC contracts and any recommendations for removing them.

## SAMPLE OF NOTICE OF INTENT TO AWARD Installation Letter Head

OFFICE SYMBOL

Date

MEMORANDUM THRU

Your Region Engineer Office, ATTN: Region ESPC Program Manager

Headquarters, Installation Management Command, ATTN: IMPW-E, 2511 Jefferson Davis Highway, Arlington, VA 22202-3926

FOR Department of Army, Assistant Chief of Staff for Installation Management (ACSIM) ATTN: DAIM-ODF, Room 8709 Presidential Towers, 2511 Jefferson Davis Highway, Arlington, VA 22202

SUBJECT: Notice of Award of a Task Order against an ESPC Contract

1. The purpose of this memorandum is to notify ACSIM that (*Contracting Agency*) awarded an ESPC Task Orders to (*Name of ESCO*) in the amount of \$ 0.0M on behalf of (*Installation*).
2. Additional information on the project is provided in Enclosure.
3. Our point of contact for this action is Mr. John Doe, (703) 555-4531, email john.doe@us.army.mil.

FOR THE COMMANDER

Encl

COL R. U. Sure  
Garrison Commander  
FORT XYZ

## **PROCEDURAL GUIDANCE 2K REQUEST APPROVAL OF AN ESPC DELIVERY ORDER/ TASK ORDER (TO)**

### **CRITERIA FOR ESPC APPROVAL**

- a. ESPC contracts may be entered into for terms up to 25 years, as authorized by 42 USC 8287, Section 801. For ID/IQ ESPC contracts, this may apply to either the basic contract or the individual task order, depending on how the contract is written. Contact the specific ID/IQ contracting agency involved for clarification on their contract terms.
- b. The contract shall be solely for the purpose of achieving energy and water savings and benefits ancillary to that purpose. While there is no limit on ancillary savings, care must be taken to ensure that the ancillary savings are real, and remain available to fund the contract payments.
- c. The ESCO shall incur the cost of making energy audits, preparing designs (if required), acquiring and installing equipment, performing necessary operations and maintenance, assisting in energy resource management, and training personnel, in exchange for a portion of the energy and ancillary savings directly resulting from implementation of such measures during the term of the contract.
- d. The contract shall require an annual energy audit. If payments are made monthly on the basis of contractor estimates there will be an annual measurement and verification to “true up” the payment on an annual basis.
- e. Aggregate annual payments by an Installation to both the utility and the ESCO during contract years may not exceed the amount that the Installation would have paid for utilities (including operation, maintenance, repair, and other ancillary costs) without the contract.
- f. When awarding an ESPC TO the Installation must have funds available and adequate for payment of the anticipated payments for the balance of the fiscal year that the contract is awarded in. (Example If the Installation awards a TO in March and anticipates paying the contractor \$100K per month during the remaining 6 months of the fiscal year, then the Installation must have \$600K available at the time of award).
- g. The Installation may incur long term obligations pursuant to ESPC contracts to finance energy conservation measures provided guaranteed savings exceed total project cost including debt service requirements. The contract shall specify the terms and conditions of any government payments and performance guarantees. The contract shall provide a guarantee of savings to the Installation as appropriate and shall establish payment schedules reflecting such guarantee. Any such guarantee shall provide that the ESCO is responsible for and must perform maintenance and repair services for any energy related equipment provided by the

contractor unless the facility determines that in-house maintenance and repair is in the best interest of the government and obtains a waiver from higher headquarters.

## **SUPPORTING DOCUMENTATION FOR ESPC PROJECT APPROVAL**

ESPC projects submitted to higher authorities for review and approval must include, and will be evaluated based on, the following minimum documentation:

- a. Description/scope of the project indicating boundaries, technologies, and ESCO/Installation responsibilities. Include maps and other supporting documentation to clearly identify the location of the project, what is to be accomplished, and overall responsibilities of the ESCO (operation, maintenance, etc).
- b. Installation's requirement for the project. Identify potential benefits, as well as costs/problems, to be faced without the project.
- c. Statement regarding the absence of appropriated funds.
- d. Installation's capability with respect to administering the project. Identify who will be performing the inspection, quality control, M&V, etc.
- e. Ability to isolate the proposed ESPC project savings from other on-going energy savings initiatives.
- f. Ability to establish an accurate baseline.
- g. Ability to monitor savings.
- h. Estimated savings that the ESPC contract will generate and how they are to be divided between the ESCO and the government.

## PROCEDURAL GUIDANCE 2L

### M&V Plan and Savings Calculation Methods Outline

#### 1. Executive Summary / M&V Overview & Proposed Savings Calculations

##### 1.1 Proposed Annual Savings Overview

**Table 1. Proposed Annual Savings Overview**

[Include all applicable fuels / commodities for project, e.g., electric energy, electric demand, natural gas, fuel oil, coal, water, etc.]

ECM	Total energy savings (MMBtu/yr)	Electric energy savings (kWh/yr)	Electric demand savings (kW/yr)*	Natural gas savings (MMBtu/yr)	Water savings (gallons/yr)	Other energy savings (MMBtu/yr)	Total energy & water cost savings, Year 1 (\$/yr)	Other energy-related O&M cost savings, Year 1 (\$/yr)	Total cost savings, Year 1 (\$/yr)
Total savings									
<b>First Year Guaranteed Cost Savings: \$</b>									
<p><b><u>Notes</u></b></p> <p>*Annual electric demand savings (kW/yr) is the sum of the monthly demand savings.</p> <p><b>MMBtu=10<sup>6</sup> Btu.</b></p> <p>If energy is reported in units other than MMBtu, provide a conversion factor to MMBtu for link to delivery order schedules (e.g., 0.003413 MMBtu/kWh).</p>									

### 1.1.1 Site Use and Savings Overview (Optional)

Fill in Table 1A or provide equivalent information.

**Table 1A. Site Use and Savings Overview (Optional)**

	Total energy (MMBtu/yr)	Electric energy (kWh/yr)	Electric demand (kW/yr)*	Natural gas (MMBtu/yr)	Water (gallons/yr)	Other energy (MMBtu/yr)
Total proposed project savings						
Usage for entire site**						
% Total site usage saved						
Project square footage (KSF)						
Total site square footage (KSF)						
% Total site area affected						
<p><u>Notes</u>                      MMBtu=10<sup>6</sup> Btu                      *Annual electric demand savings (kW/yr) is the sum of the monthly demand savings.                      **Define usage period.                      KSF = 1000 square feet.                      If energy is reported in units other than MMBtu, provide a conversion factor to MMBtu for link to delivery order schedules (e.g., 0.003413 MMBtu/kWh).</p>						

## 1.2 M&V Plan Summary

**Table 2. M&V Plan Summary**

ECM.	ECM Description	M&V Option Used*	Summary of M&V Plan

\* M&V options include A, B, C, and D. Guidelines include *M&V Guidelines: Measurement & Verification for Federal Energy Projects*, Version 2.2 ([www.eere.energy.gov/femp/financing/superespcs\\_mvresources.cfm](http://www.eere.energy.gov/femp/financing/superespcs_mvresources.cfm)); and *International Performance Measurement & Verification Protocol (IPMVP)*, Volume I, March 2002 ([www.ipmvp.org](http://www.ipmvp.org)).

## 2. Whole Project Data / Global Assumptions

### 2.1 Risk & Responsibility

2.1.1 Summarize allocation of responsibility for key items related to M&V.  
Reference location of Risk & Responsibility Matrix<sup>1</sup> (if required).

### 2.2 Energy, Water, and Operations & Maintenance (O&M) Rate Data

2.2.1 Detail baseline energy and water rates.

2.2.2 Provide performance period rate adjustment factors for energy, water, and O&M cost savings, if used.

### 2.3 Schedule & Reporting for Verification Activities

2.3.1 Define requirements for witnessing of measurements during:  
Baseline development  
Post-installation verification activities  
Performance period

2.3.2 Define schedule of verification reporting activities.

**Table 3. Schedule of Verification Reporting Activities**

Item	<sup>a</sup> Recommended time of submission	<sup>a</sup> Owner's review and acceptance period
Post-Installation Report	30 to 60 days after acceptance	30 days
Annual Report	30 to 60 days after annual performance period	30 days

<sup>a</sup>Times are recommended based on industry practice; modify as needed.

<sup>1</sup> The Risk/Responsibility Matrix is Attachment 5 of the Super ESPC ID/IQ contract and is also available on FEMP's web site at [www.eere.energy.gov/femp/financing/superespcs\\_mvresources.cfm](http://www.eere.energy.gov/femp/financing/superespcs_mvresources.cfm).

### 2.3.3 Define content and format of reports:

Post-installation report.

Use Post-Installation Report Outline<sup>1</sup>.

Annual M&V reports.

Use Annual Report Outline<sup>1</sup>.

Interval M&V reports

Develop report outline if needed.

## 2.4 Operations, Preventive Maintenance, Repair, and Replacement Reporting Requirements

### 2.4.1 Define Government and ESCO reporting requirements:

Summarize key verification activities and reporting responsibilities of government and ESCO on operations, preventive maintenance, repair, and replacement items from details in ECM specific M&V Plans.

Define content of reports and reporting schedule.

## 2.5 Construction Period Savings

2.5.1 Provide overview of how construction period savings will be calculated, if applicable.

### 2.6 Status of Rebates

- Include if applicable.

2.6.1 Provide a summary of the source of any third-party rebates or incentives provided on this project.

2.6.2 Provide status of any third-party rebates or incentives.

### 2.7 Dispute Resolution

2.7.1 Describe plan for resolving disputes regarding issues such as baseline, baseline adjustment, energy savings calculation, and the use of periodic measurements.

---

<sup>1</sup> Electronic copies of *Post-Installation Report Outline* and *Annual Report Outline* are available at [www.eere.energy.gov/femp/financing/superespcs\\_mvresources.cfm](http://www.eere.energy.gov/femp/financing/superespcs_mvresources.cfm).



### **3. ECM [Name / #] M&V Plan and Savings Calculation Methods**

Develop section for each ECM.

#### **3.1 Overview of ECM, M&V Plan, and Savings Calculation for ECM**

**3.1.1** Summarize the scope of work, location, and how cost savings are generated.

Describe source of all savings including energy, water, O&M, and other (if applicable).

**3.1.2** Specify the M&V guideline and option used<sup>1</sup>.

**3.1.3** Provide an overview of M&V Activities for ECM.

Explain intent of M&V plan, including what is being verified.

**3.1.4** Provide an overview of savings calculations methods for ECM.

Provide a general description of analysis methods used for savings calculations.

#### **3.2 Energy and Water Baseline Development**

**3.2.1** Describe in general terms how the baseline for this ECM is defined.

**3.2.2** Describe variables affecting baseline energy or water use.

- Include variables such as weather, operating hours, set point changes, etc.
- Describe how each variable will be quantified, i.e. measurements, monitoring, assumptions, manufacturer data, maintenance logs, engineering resources, etc.

**3.2.3** Define key system performance factors characterizing the baseline conditions.

- Include factors such as comfort conditions, lighting intensities, temperature set points, etc.

**3.2.4** Define requirements for government witnessing of measurements if different than whole project data requirements included in Section 2.3.

**3.2.5 Provide details of baseline data collected, including:**

- Parameters monitored/measured

---

<sup>1</sup> Guidelines include *M&V Guidelines: Measurement & Verification for Federal Energy Projects*, Version 2.2 ([www.eere.energy.gov/femp/financing/superespcs\\_mvresources.cfm](http://www.eere.energy.gov/femp/financing/superespcs_mvresources.cfm)); and *International Performance Measurement & Verification Protocol (IPMVP)*, Volume I, March 2002 ([www.ipmvp.org](http://www.ipmvp.org)). M&V options include A, B, C, and D.

- Details of equipment monitored, i.e. location, type, model, quantity, etc.
- Sampling plan, including details of usage groups and sample sizes
- Duration, frequency, interval, and seasonal or other requirements of measurements
- Personnel, dates, and times of measurements Proof of government witnessing of measurements (if required)
- Monitoring equipment used
- Installation requirements for monitoring equipments (test plug for temperature sensors, straight pipe for flow measurement, etc.)
- Certification of calibration / calibration procedures followed
- Expected accuracy of measurements/monitoring equipment
- Quality control procedures used
- Form of data (.xls, .csv, etc.)
- Results of measurements (attach appendix and electronic forma as necessary)
- Completed data collection forms, if used

3.2.6 Provide details of baseline data analysis performed, including:

- Analysis using results of measurements
- Weather normalized regressions
- Weather data used and source of data

### 3.3 Proposed Energy & Water Savings Calculations and Methodology

3.3.1 Provide detailed description of analysis methodology used.

- Describe any data manipulation or analysis that was conducted prior to applying savings calculations.

3.3.2 Detail all assumptions and sources of data, including all stipulated values used in calculations.

3.3.3 Include equations and technical details of all calculations made. (Use appendix and electronic format as necessary.) Include description of data format (headings, units, etc.).

3.3.4 Details of any savings or baseline adjustments that may be required.

3.3.5 Detail energy and water rates used to calculate cost savings.

- Provide performance period energy and water rate adjustment factors, if different from in section 2.2.2.

3.3.6 Detail proposed annual savings for this energy conservation measure for performance period.

Summarize information in Table 4.

### 3.4 Operations and Maintenance and Other Cost Savings

#### 3.4.1 Provide justification for O&M cost savings, if applicable.

- Describe how savings are generated
- Detail cost savings calculations.
- Provide performance period O&M cost savings adjustment factors, if different from in section 2.2.2.

#### 3.4.2 Provide justification for other cost savings, if applicable.

- Describe how savings are generated.
- Detail cost savings calculations.
- Provide performance period adjustment factors, if different from in section 2.2.2.

### 3.5 Proposed Annual Savings For ECM

**Table 4. Proposed Annual Savings For ECM**

[Include all applicable fuels / commodities for project, e.g., electric energy, electric demand, natural gas, fuel oil, coal, water, etc.]

	Total energy use (MMBtu/yr)	Electric energy use (kWh/yr)	Electric energy cost, Year 1 (\$/yr)	Electric demand* (kW/yr)	Electric demand cost, Year 1 (\$/yr)	Natural gas use (MMBtu/yr) *	Natural gas cost, Year 1 (\$/yr)	Water use (gallons/yr)	Water cost, Year 1 (\$/yr)	Other energy use (MMBtu/yr)	Other energy cost, Year 1 (\$/yr)	Other energy-related O&M costs, Year 1 (\$/yr)	Total costs, Year 1 (\$/yr)
Baseline use													
Post-installation use													
Savings													

**Notes**

\*Annual electric demand savings (kW/yr) is the sum of the monthly demand savings.

**MMBtu = 10<sup>6</sup> Btu.**

If energy is reported in units other than MMBtu, provide a conversion factor to MMBtu for link to delivery order schedules (e.g., 0.003413 MMBtu/kWh).

### 3.6 Post-Installation M&V Activities

3.6.1 Describe the intent of post-installation verification activities, including what will be verified.

3.6.2 Describe variables affecting post-installation energy or water use.

- Include variables such as weather, operating hours, set point changes, etc.
- Describe how each variable will be quantified, i.e. measurements, monitoring, assumptions, manufacturer data, maintenance logs, engineering resources, etc.

3.6.3 Define key system performance factors characterizing the post-installation conditions such as lighting intensities, temperature set points, etc.

3.6.4 Define requirements for government witnessing of measurements if different than whole project data requirements included in Section 2.3.

3.6.5 Provide details of post-installation data to be collected, including:

- Parameters to be monitored
- Details of equipment to be monitored (location, type, model, quantity, etc.)
- Sampling plan, including details of usage groups and sample sizes
- Duration, frequency, interval, and seasonal or other requirements of measurements
- Monitoring equipment to be used
- Installation requirements for monitoring equipment
- Calibration requirements / procedures
- Expected accuracy of measurements/monitoring equipment
- Quality control procedures to be used
- Form of data to be collected (.xls, .csv, etc.)
- Sample data collection forms (optional)

3.6.6 Detail data analysis to be performed.

### 3.7 Performance Period Verification Activities

3.7.1 Describe variables affecting performance period energy or water use.

- Include variables such as weather, operating hours, set point changes, etc.
- Describe how each variable will be quantified, i.e. measurements, monitoring, assumptions, manufacturer data, maintenance logs, engineering resources, etc.

3.7.2 Define key system performance factors characterizing the performance period conditions.

- Include factors such as comfort conditions, lighting intensities, temperature set points, etc.

3.7.3 Describe the intent of performance period verification activities – what will be verified.

3.7.4 Provide detailed schedule of performance period verification activities and inspections.

3.7.5 Define requirements for government witnessing of measurements if different than whole project data requirements included in Section 2.3.

3.7.6 Provide details of performance period data to be collected, including:

- Parameters to be monitored
- Details of equipment to be monitored (location, type, model, quantity, etc.)
- Sampling plan, including details of usage groups and sample sizes
- Duration, frequency, interval, and seasonal or other requirements of measurements
- Monitoring equipment to be used
- Installation requirements for monitoring equipment
- Calibration requirements/procedures
- Expected accuracy of measurements/monitoring equipment
- Quality control procedures to be used
- Form of data to be collected (.xls, .csv, etc.)
- Sample data collection forms (optional)

3.7.7 Detail data analysis to be performed.

3.7.8 Define operations, preventive maintenance, repair, and replacement reporting requirements.

- Detail verification activities and reporting responsibilities of government and ESCO on operations, preventive maintenance, repair, and replacement items.
- Define contents of report and reporting schedule, if different than in global section 2.4.

Page intentionally blank



## **PROCEDURAL GUIDANCE 2M Sample Annual M&V Report Outline**

**Contract # / Task Order # / Task #:** (include as appropriate)

**Performance Period Dates Covered:** \_\_\_\_\_ to \_\_\_\_\_

**Contract year #:** \_\_\_\_\_

### **1. Executive Summary**

#### **1.1 Project Background**

1.1.1 Provide an overview of project background, including:

Contract # / Task Order # / Task # / Modification # (as appropriate)

Dates of relevant delivery order modifications

Performance period dates covered

Project acceptance date

#### **1.2 Brief Project and ECM Descriptions**

1.2.1 Provide an overview what was done and how savings are generated.

1.2.2 Note any changes in project scope between the Final Proposal (including any relevant delivery order modifications) and as-built conditions as recorded in post-installation report.

#### **1.3 Summary of Proposed and Verified Energy and Cost Savings**

1.3.1 Compare verified savings for Performance Year # to Guaranteed Cost Savings for Year #. State whether guarantee is fulfilled for year. If not, provide detailed explanation.

1.3.2 Define performance period.

1.3.3 Summarize information in Table 1 and Table 2.

**Table 1. Proposed Annual Savings Overview**

[Include all applicable fuels / commodities for project, e.g., electric energy, electric demand, natural gas, fuel oil, coal, water, etc.]

ECM	Total energy savings (MMBtu/yr)	Electric energy savings (kWh/yr)	Electric demand savings (kW/yr)*	Natural gas savings (MMBtu/yr)	Water savings (gallons/yr)	Other energy savings (MMBtu/yr)	Total energy & water cost savings, Year # (\$/yr)	Other energy-related O&M cost savings, Year # (\$/yr)	Total cost savings, Year # (\$/yr)
<b>Total Savings</b>									
<b>Year [#] guaranteed cost savings: \$</b>									
<p><u>Notes</u>                      MMBtu = 10<sup>6</sup> Btu.                      *Annual electric demand savings (kW/yr) is the sum of the monthly demand savings.                      If energy is reported in units other than MMBtu, provide a conversion factor to MMBtu for link to delivery order schedules (e.g., 0.003413 MMBtu/kWh).                      Guaranteed cost savings for project are defined in cost schedule TO-1 in delivery order.                      The proposed savings for each ECM are included in schedule TO-4 in the delivery order.</p>									

**Table 2. Verified Savings for Performance Year [ # ]**

[Include all applicable fuels / commodities for project, e.g., electric energy, electric demand, natural gas, fuel oil, coal, water, etc.]

ECM	Total energy savings (MMBtu/yr)	Electric energy savings (kWh/yr)	Electric demand savings (kW/yr)*	Natural gas savings (MMBtu/yr)	Water savings (gallons/yr)	Other energy savings (MMBtu/yr)	Total energy & water cost savings, Year # (\$/yr)	Other energy-related O&M cost savings, Year # (\$/yr)	Total cost savings, Year # (\$/yr)
<b>Total savings</b>									
<p><u>Notes</u>                      MMBtu = 10<sup>6</sup> Btu.                      *Annual electric demand savings (kW/yr) is the sum of the monthly demand savings.                      If energy is reported in units other than MMBtu, provide a conversion factor to MMBtu for link to delivery order schedules (e.g. 0.003413 MMBtu/kWh).</p>									

### 1.4 Savings Adjustments

- Provide summary of any energy and/or cost savings adjustments required.

### 1.5 Performance and O&M Issues

- Note impact of operating deficiencies or enhancements on generation of savings.
- Note impact of maintenance deficiencies on generation of savings.
- Detail any deficiencies that need to be addressed by ESCO or Government.

### 1.6 Energy, Water, and O&M Rate Data

1.6.1 Detail energy and water rates used to calculate cost savings for this period.

1.6.2 Provide performance period rate adjustment factors for energy, water and O&M cost savings, if used.

1.6.3 Report actual energy and water rates at site for same period (optional).

### 1.7 Verified Savings To Date

Summarize information in Table 3.

**Table 3. Verified Savings for Performance Period To Date**

[Include all applicable fuels / commodities for project, e.g., electric energy, electric demand, natural gas, fuel oil, coal, water, etc.]

Year #	Total energy savings (MMBtu/yr)	Electric energy savings (kWh/yr)	Electric demand savings (kW/yr)*	Natural gas savings (MMBtu/yr)	Water savings (gallons/yr)	Other energy savings (MMBtu/yr)	Total energy & water cost savings (\$/yr)	Other energy-related O&M cost savings (\$/yr)	Total cost savings (\$/yr)	Guaranteed cost savings for year
<b>Total savings</b>										
<p><u>Notes</u>                      MMBtu = 10<sup>6</sup> Btu.                      *Annual electric demand savings (kW/yr) is the sum of the monthly demand savings.                      If energy is reported in units other than MMBtu, provide a conversion factor to MMBtu for link to cost schedules (e.g., 0.003413 MMBtu/kWh).</p>										

## 2. Details for ECM [name / #]

Develop section for each ECM.

### 2.1 Overview of ECM, M&V Plan, and Savings Calculation for ECM

2.1.1 Summarize the scope of work, location, and how cost savings are generated.

- Describe source of all savings including energy, water, O&M, and other (if applicable).

2.1.2 Discuss any changes in scope / results recorded in post-installation M&V report.

2.1.3 State M&V guideline and option used<sup>1</sup>.

2.1.4 Provide an overview of M&V activities for ECM.

- Explain the intent of M&V plan, including what is being verified.

2.1.5 Provide an overview of savings calculation methods for ECM.

- Provide a general description of analysis methods used for savings calculations.

### 2.2 M&V Activities Conducted This Period

- Detail measurements, monitoring, and inspections conducted this reporting period in accordance with M&V plan.

2.2.1 Measurement equipment used

2.2.2 Equipment calibration documentation

2.2.3 Dates/times of data collection or inspections, names of personnel, and documentation of government witnessing

2.2.4 Details to confirm adherence to sampling plan

2.2.5 Include all measured values for this period. Include periods of monitoring and durations and frequency of measurements. (Use appendix and electronic format as necessary). Include description of data format (headings, units, etc.).

2.2.6 Describe how performance criteria have been met.

---

<sup>1</sup> M&V options include A, B, C & D. Guidelines include *M&V Guidelines: Measurement & Verification for Federal Energy Projects*, Version 2.2

([www.eere.energy.gov/femp/financing/superespcs\\_mvresources.cfm](http://www.eere.energy.gov/femp/financing/superespcs_mvresources.cfm)); and *International Performance Measurement & Verification Protocol (IPMVP)*, Volume I, March 2002 ([www.ipmvp.org](http://www.ipmvp.org)).

2.2.7 Detail any performance deficiencies that need to be addressed by ESCO or Government.

2.2.8 Note impact of performance deficiencies or enhancements on generation of savings.

## 2.3 Verified Savings Calculations and Methodology

2.3.1 Provide detailed description of analysis methodology used.

- Describe any data manipulation or analysis that was conducted prior to applying savings calculations.

2.3.2 Detail all assumptions and sources of data, including all stipulated values used in calculations.

2.3.3 Include equations and technical details of all calculations made. (Use appendix and electronic format as necessary.) Include description of data format (headings, units, etc.).

2.3.4 Details of any baseline or savings adjustments made.

2.3.5 Detail energy and water rates used to calculate cost savings.

- Provide performance period energy & water rate adjustment factors, if used.
- Report actual energy and water rates at site for same period (optional).

2.3.6 Detail verified savings for this energy conservation measure for performance year.

Include Table 4.

## 2.4 Details of O&M and Other Savings (if applicable)

2.4.1 Describe source of savings, if applicable.

- Describe verification activities.
- Provide performance period O&M savings adjustment factors, if applicable.

2.4.1 Describe source of other savings, if applicable.

- Describe verification activities.
- Provide performance period adjustment factors, if applicable.

**Table 4. Verified Annual Savings For ECM for Performance Year #**

[Include all applicable fuels / commodities for project, e.g., electric energy, electric demand, natural gas, fuel oil, coal, water, etc.]

	Total energy use (MMBtu/yr)	Electric energy use (kWh/yr)	Electric energy cost, Year # (\$/yr)	Electric demand* (kW/yr)	Electric demand cost, Year # (\$/yr)	Natural gas (MMBtu/yr)*	Natural gas cost, Year # (\$/yr)	Water use (gallons/yr)	Water cost, Year # (\$/yr)	Other energy use (MMBtu/yr)	Other energy cost, Year # (\$/yr)	Other energy-related O&M costs, Year # (\$/yr)	Total costs, Year # (\$/yr)
Baseline use													
Performance Year # use													
Savings													
<p><b>Notes</b>                      MMBtu = 10<sup>6</sup> Btu.                      *Annual electric demand savings (kW/yr) is the sum of the monthly demand savings.                      If energy is reported in units other than MMBtu, provide a conversion factor to MMBtu for link to cost schedules (e.g., 0.003413 MMBtu/kWh).</p>													

## 2.5 O&M and Other Activities

### 2.5.1 Operating requirements:

- State organization(s) responsible for equipment operations. If appropriate, detail how responsibilities are shared.
- Summarize key operating procedures and any related verification activities.
- Detail any deficiencies that need to be addressed by ESCO or Government.
- Note impact of operating deficiencies or enhancements on generation of savings.

### 2.5.2 Preventive maintenance requirements:

- State organization(s) responsible for performing maintenance. If appropriate, detail how responsibilities are shared.
- Verification of scheduled maintenance items completed by ESCO or Government.
- Detail any deficiencies that need to be addressed by ESCO or Government.
- Note impact of maintenance deficiencies on generation of savings.

### 2.5.3 Repair and replacement requirements:

- State organization(s) responsible for repair and replacement. If appropriate, detail how responsibilities are shared.
- Summary of activities conducted this period by ESCO or Government.
- Detail any deficiencies that need to be addressed by ESCO or Government.
- Note impact of equipment deficiencies on generation of savings.

Page intentionally blank



## **PROCEDURAL GUIDANCE 2N Post-Installation Report Outline**

**Contract # / Task Order # / Task #/ Modification #:** (include as appropriate)

**Performance Period Dates Covered:** \_\_\_\_\_ to \_\_\_\_\_

### **1 Executive Summary**

#### **1.1 Project Background**

1.1.1 Provide an overview of project background, including:

- Contract # / Task Order # / Task # / Modification # (as appropriate)
- Dates of relevant delivery order modifications
- Performance period dates covered
- Project acceptance date (actual or expected)

#### **1.2 Brief Project and ECM Descriptions**

1.2.1 Provide an overview what was done and how savings are generated.

1.2.2 Note any changes in project scope between the Final Proposal (including any relevant delivery order modifications) and as-built conditions.

#### **1.3 Proposed and expected energy and cost savings for Year 1 of the performance period**

1.3.1 Compare expected savings for first performance year to first year guaranteed cost savings. State whether guarantee is expected to be fulfilled for first year. If not, provide detailed explanation.

1.3.2 Summarize information in Table 1 and Table 2.

Note: Expected savings are prediction for first year based on post-installation M&V activities. Verified savings for first year of performance period will be documented in annual report. The proposed savings for each ECM are included in schedule TO-4 of the delivery order.

**Table 1. Proposed Annual Savings Overview**

[Include all applicable fuels / commodities for project, e.g., electric energy, electric demand, natural gas, fuel oil, coal, water, etc.]

ECM	Total energy savings (MMBtu/yr)	Electric energy savings (kWh/yr)	Electric demand savings (kW/yr)*	Natural gas savings (MMBtu/yr)	Water savings (gallons/yr)	Other energy savings (MMBtu/yr)	Total energy & water cost savings, Year 1 (\$/yr)	Other energy-related O&M cost savings, Year 1 (\$/yr)	Total cost savings, Year 1 (\$/yr)
Total savings									

**First year guaranteed savings: \$**

**Notes**

**MMBtu=10<sup>6</sup> Btu.**

\*Annual electric demand savings (kW/yr) is the sum of the monthly demand savings.  
 If energy is reported in units other than MMBtu, provide a conversion factor to MMBtu for link to delivery order schedules (e.g., 0.003413 MMBtu/kWh).  
 Guaranteed cost savings for project are defined in schedule TO-1 in delivery order.  
 The proposed savings for each ECM are included in schedule TO-4 in delivery order.

**Table 2. Expected Savings Overview for First Performance Year**

[Include all applicable fuels / commodities for project, e.g., electric energy, electric demand, natural gas, fuel oil, coal, water, etc.]

ECM	Total energy savings (MMBtu/yr)	Electric energy savings (kWh/yr)	Electric demand savings (kW/yr)*	Natural gas savings (MMBtu/yr)	Water savings (gallons/yr)	Other energy savings (MMBtu/yr)	Total energy & water cost savings, Year 1 (\$/yr)	Other energy-related O&M cost savings, Year 1 (\$/yr)	Total cost savings, Year 1 (\$/yr)
Total savings									

**Notes**

**MMBtu=10<sup>6</sup> Btu.**

\*Annual electric demand savings (kW/yr) is the sum of the monthly demand savings.  
 If energy is reported in units other than MMBtu, provide a conversion factor to MMBtu for link to delivery order schedules (e.g., 0.003413 MMBtu/kWh).

## 1.4 Energy, Water, and O&M Rate Data

1.4.1 Detail energy and water rates used to calculate cost savings for this period.

1.4.2 Provide performance period rate adjustment factors for energy, water, and O&M cost savings, if used.

1.4.3 Report actual energy and water rates at site for same period (optional).

## 1.5 Savings Adjustments

1.5.1 Provide summary of any energy and/or cost savings adjustments required between Final Proposal (including any relevant delivery order modifications) and as-built conditions.

1.5.2 Describe the impact in changes between the Final Proposal (including any relevant delivery order modifications) and as-built conditions based on post-installation M&V results.

## 1.6 Construction Period Savings

1.6.1 Provide a summary of construction period savings, if applicable.

1.6.2 Provide overview of how construction period savings are calculated.

## 1.7 Status of Rebates

- Include if applicable.

1.7.1 Provide a summary of the source of any third-party rebates or incentives provided on this project.

1.7.2 Provide status of any third-party rebates or incentives.

## **2. ECM [Name / #] M&V Activities and Expected First Year Savings**

- Develop section for each ECM.

### 2.1 Overview of ECM, M&V Plan, and Savings Calculation for ECM

2.1.1 Summarize the scope of work, location, and how cost savings are generated.

- Describe source of all savings including energy, water, O&M, and other (if applicable).

2.1.2 State M&V guideline and option used<sup>1</sup>.

2.1.3 Provide an overview of M&V activities for ECM.

- Explain the intent of M&V plan, including what is being verified.

2.1.4 Provide an overview of savings calculation methods for ECM.

- Provide a general description of analysis methods used for savings calculations.

## 2.2 Installation Verification

2.2.1 Detail any changes between Final Proposal (including any relevant delivery order modifications) and as-built conditions.

2.2.2 Provide details of energy and cost savings impact from changes between Final Proposal (including any relevant delivery order modifications) and as-built conditions based on post-installation M&V results. Summarize information in Table 4.

2.2.3 Describe construction period savings (if applicable). Include date ECM was in effect, and reference acceptance documentation.

2.2.4 Detail savings calculations for construction period savings.

---

<sup>1</sup> M&V options include A, B, C, and D. Guidelines include *M&V Guidelines: Measurement & Verification for Federal Energy Projects*, Version 2.2 ([www.eere.energy.gov/femp/financing/superespcs\\_mvresources.cfm](http://www.eere.energy.gov/femp/financing/superespcs_mvresources.cfm)); and *International Performance Measurement & Verification Protocol (IPMVP)*, Volume I, March 2002 ([www.ipmvp.org](http://www.ipmvp.org)).

**Table 4. Impact to energy and cost savings from changes between final proposal and as-built conditions for ECM**

	Total energy savings (MMBtu/yr)	Electric energy savings (kWh/yr)	Electric energy cost savings, Year 1 (\$/yr)	Electric demand savings* (kW/yr)	Electric demand cost savings, Year 1 (\$/yr)	Natural gas savings (MMBtu/yr) **	Natural gas cost savings, Year 1 (\$/yr)	Water savings (gallons/yr)	Water cost savings, Year 1 (\$/yr)	Other energy savings (MMBtu/yr)	Other energy cost savings, Year 1 (\$/yr)	Other energy-related O&M cost savings, Year 1 (\$/yr)	Total cost savings, Year 1 (\$/yr)
Proposed													
Expected													
Variance													
<p><u>Notes</u>                      MMBtu = 10<sup>6</sup> Btu.                      *Annual electric demand savings (kW/yr) is the sum of the monthly demand savings.                      If energy is reported in units other than MMBtu, provide a conversion factor to MMBtu for link to delivery order schedules (e.g. 0.003413 MMBtu/kWh).</p>													

Note: Expected savings are prediction for first year based on post-installation M&V activities. Verified savings for first year of performance period will be documented in annual report.

## 2.3 Post-Installation M&V Activities Conducted

- Detail measurements, monitoring, and inspections conducted in accordance with M&V plan:

### 2.3.1 Measurement equipment used

### 2.3.2 Equipment calibration documentation

### 2.3.3 Dates/times of data collection or inspections, names of personnel, and documentation of government witnessing

### 2.3.4 Details to confirm adherence to sampling plan

### 2.3.5 Include all post-installation measured values. Include periods of monitoring and durations and frequency of measurements. (Use appendix and electronic format as necessary). Include description of data format (headings, units, etc.).

### 2.3.6 Describe how performance criteria have been met.

### 2.3.7 Detail any performance deficiencies that need to be addressed by ESCO or Government.

### 2.3.8 Note impact of performance deficiencies or enhancements on generation of savings.

## 2.4 Expected Savings Calculations and Methodology

### 2.4.1 Provide detailed description of analysis methodology used.

- Describe any data manipulation or analysis that was conducted prior to applying savings calculations.

### 2.4.2 Detail all assumptions and sources of data, including all stipulated values used in calculations.

### 2.4.3 Include equations and technical details of all calculations made. (Use appendix and electronic format as necessary.) Include description of data format (headings, units, etc.).

### 2.4.4 Details of any baseline or savings adjustments made.

### 2.4.5 Detail energy and water rates used to calculate cost savings.

- Provide performance period energy and water rate adjustment factors, if used.
- Report actual energy and water rates at site for same period (optional).

2.4.6 Detail expected savings for this energy conservation measure for first year.

- Summarize information in Table 5.

2.5 Details of O&M and Other Savings (if applicable)

2.5.1 Describe source of O&M savings, if applicable.

- Describe verification activities.
- Provide performance period O&M cost savings adjustment factors, if applicable.

2.5.2 Describe source of other savings, if applicable.

- Describe verification activities.
- Provide performance period adjustment factors, if applicable.

Note: Expected savings are prediction for first year based on post-installation M&V activities. Verified savings for first year of performance period will be documented in the annual report.

**Table 5. Expected Year 1 Savings for ECM**

[Include all applicable fuels / commodities for project, e.g., electric energy, electric demand, natural gas, fuel oil, coal, water, etc.]

	Total energy use (MMBtu/yr)	Electric energy use (kWh/yr)	Electric energy cost (\$/yr)	Electric demand* (kW/yr)	Electric demand cost (\$/yr)	Natural gas use (MMBtu/yr)	Natural gas cost (\$/yr)	Water use (gallons/yr)	Water cost (\$/yr)	Other energy use (MMBtu/yr)	Other energy cost (\$/yr)	Other energy-related O&M costs (\$/yr)	Total costs (\$/yr)
Baseline use													
Post-installation use													
Savings													
<p><u>Notes</u>                      MMBtu = 10<sup>6</sup> Btu.                      *Annual electric demand savings (kW/yr) is the sum of the monthly demand savings.                      If energy is reported in units other than MMBtu, provide a conversion factor to MMBtu for link to delivery order schedules (e.g. 0.003413 MMBtu/kWh).</p>													



## **PROCEDURAL GUIDANCE 3A CORPS OF ENGINEERS ID/IQ ESPC CONTRACT PROCESS**

### **Summary Information:**

- a. The United States Army Engineering and Support Center at Huntsville, AL (CEHNC) can provide complete project management; technical support including mechanical, electrical, controls, environmental, structural, architectural, civil, safety, cost, and financial; contracting; and legal assistance for ESPC implementation during task order development, construction, and payment.
- b. CEHNC can partner with various Corps of Engineer districts to provide quality assurance during construction.
- c. CEHNC currently administers two sets of Area-Wide ID/IQ contracts that cover all government agencies in all 50 states, the District of Columbia and Puerto Rico. A resolicitation of the Area-Wide ID/IQ contracts is in progress with award expected in late FY 2008/early FY 2009. For the latest information on using these contracts, see their ESPC website:  
[www.hnd.usace.army.mil/pao/FactShtsFY05/ISCX-Mar2005.pdf](http://www.hnd.usace.army.mil/pao/FactShtsFY05/ISCX-Mar2005.pdf).
- d. Contact the Program Manager at 256-895-1417 for customer assistance.

### **Requirements:**

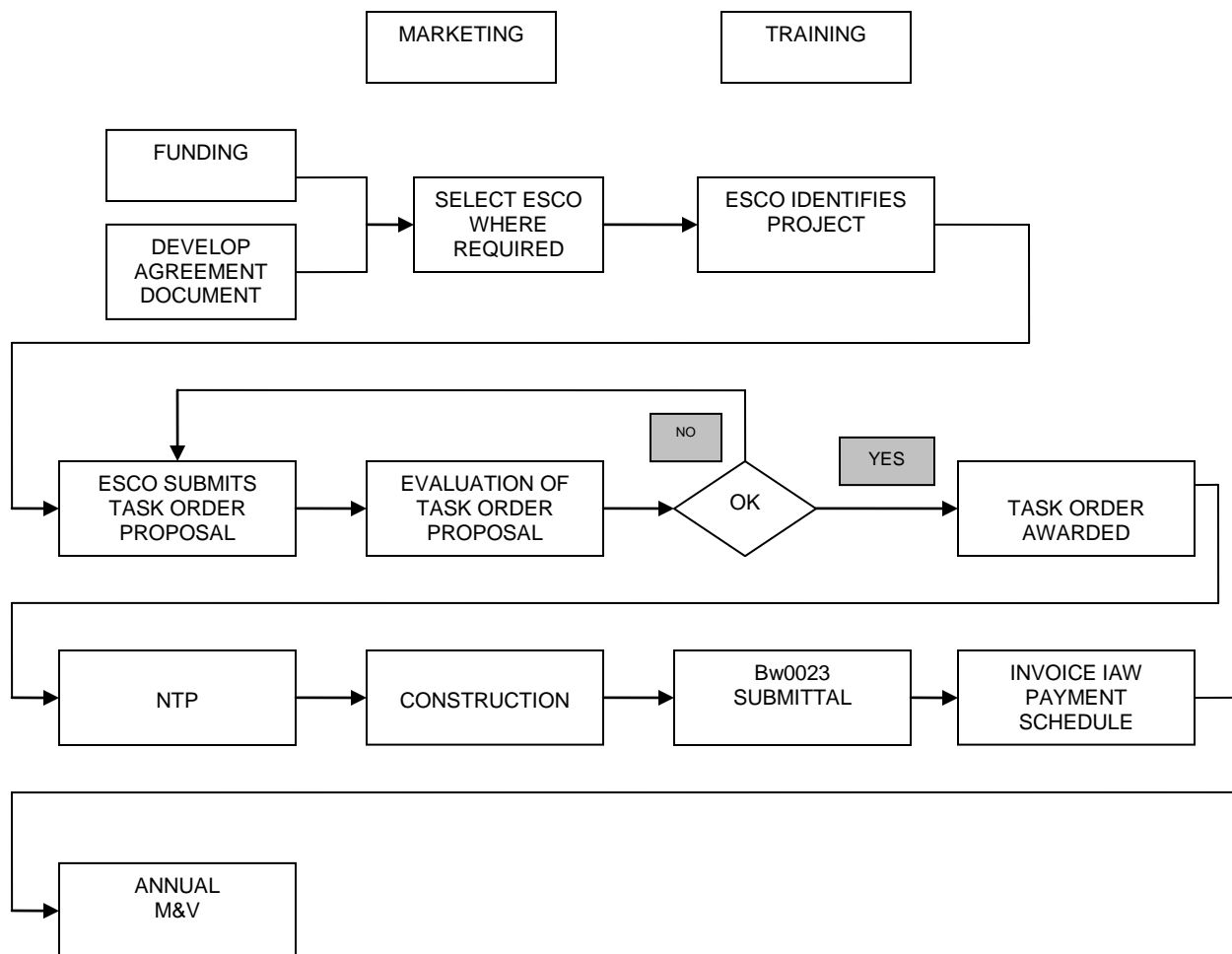
**Funding** – CEHNC operates the ESPC Program on a 100% reimbursable basis. Funds must be identified and received before CEHNC work may commence.

Work begins with contractor selection that complies with the DFAR section 803.

The process continues with task order development, construction and payment phases. Prior to performing work, CEHNC provides the customer with an estimate of cost for the desired level of effort. The cost for CEHNC support varies depending on customers' desires and individual project complexity. If funds provided by the customer exceed the required funds for implementation, the excess funds are returned to the customer.

**Agreement Document** – CEHNC requires an Agreement Document between itself and the Installation in order to specify and clarify the roles and responsibilities of CEHNC and the customer. The Agreement Document is provided to the Installation in draft form for their coordination and review. Upon receipt of the Installation's comments, the Agreement Document is finalized and sent to the Installation for signature.

**ESCO Selection** – An additional document required from the Installation is a customer survey form. This form provides the basis for the beginning of the cooperative selection process by CEHNC and the installation for one ESPC contractor to work at the Installation's site. It identifies general information about the site and customers desire to aid in contractor selection.



**ESPC Process Flow Chart**

1. **Marketing** – The Energy Services Company (ESCO) may meet with Installation personnel to discuss the ESCO’s capabilities to provide energy services support to the Installation and to educate Installation personnel in the use of ESPCs. Support agencies, such as CEHNC, also provide some marketing and assistance at this stage. ESCO’s can include in their marketing services a cursory review of the potential for energy efficiency improvement projects on a particular facility
2. **Training** – Training on use and management of an ESPC task order is conducted with Installation personnel and ESCO’s to improve their knowledge and understanding of the process, legislation, and appropriate management controls. Specific training is presented at our annual ESCO / Customer Meeting, and also provided prior to the beginning of all phases of an ESPC project.

3. **Funding** – As a reimbursable activity, CEHNC requires funding to initiate their support. Budget projections to sustain CEHNC labor are developed 3 times per year: April, June, and August. These budget projections look 2.5 years ahead.
4. **Develop Agreement Document** – For work performed by CEHNC, an Agreement Document is currently required between the Installation and CEHNC. (Note: see “Agreement Document” in “Requirements” section above.)
5. **Select ESCO** (Where required)– An ESCO is selected to perform work at an Installation based upon the Installation’s needs and requirements, and an ESCO’s capabilities to support the Installation. Additional tasks may be awarded directly to the same ESCO at the selected Installation for projects identified within a 3 year period. The selection criteria is streamlined and is based on the 803 process, which ensures the fair competition of a task order. CEHNC holds an on-site kick-off meeting with the ESCO and Installation personnel in order to establish roles and responsibilities, and a project development and review schedule.
6. **ESCO identifies projects** – The ESCO conducts a site survey and evaluates the Installation facilities for potential energy conservation measures (ECMs) that will produce savings and improve the facilities. The contractor will provide a site survey within 45 days of notification of their selection.
7. **ESCO submits Task Order Proposal** – The ESCO submits their proposal of projects to CEHNC.
8. **Evaluation of Task Order Proposal** – CEHNC and the Installation review the proposal for the needs of the Installation, cost, life cycle costs, technical, and M&V, examine for life, health, fire, and safety concerns, and integration with other systems. It may be necessary after review for the proposal to be returned to the ESCO to address questions, comments, and concerns prior to approval. If the government and the ESCO cannot reach agreement, no task order is issued.
9. **Task Order Awarded** – If the proposal is accepted, a task order is awarded for the ESCO to provide the services addressed in the proposal.
10. **Notice to Proceed (NTP)** – After the Task Order is awarded the contracting officer issues the Notice to Proceed letter to the contractor and the customer authorizing or initiating the construction phase of the project.
11. **Construction** – During the construction phase of the project the ESCO provides the agreed upon services to the Installation. Corps of Engineers construction office or Installation provides quality assurance function in accordance with approved QA/QC Plans.
12. **BW0023 Submitted** – Once construction is complete, the contractor submits the BW0023 (Final Site Report) to the Installation and CEHNC for review. It may be

necessary to return the BW0023 to the ESCO to address questions, comments, and concerns prior to approval.

13. **Invoice In Accordance With (IAW) Payment Schedule** – Once the BW0023 is approved by the Installation and CEHNC, modifies the task order to reflect the BW0023 approval, the ESCO begins billing in accordance with the payment schedule in the task order, and the ESCO is paid accordingly.
14. **Annual M&V** – Annual M&V report prepared and submitted by contractor for review by CEHNC and/or the Installation. Payments are adjusted as required if M&V reports indicated savings shortfall.

## PROCEDURAL GUIDANCE 3B DOE ID/IQ CONTRACT PROCESS

### SUMMARY INFORMATION

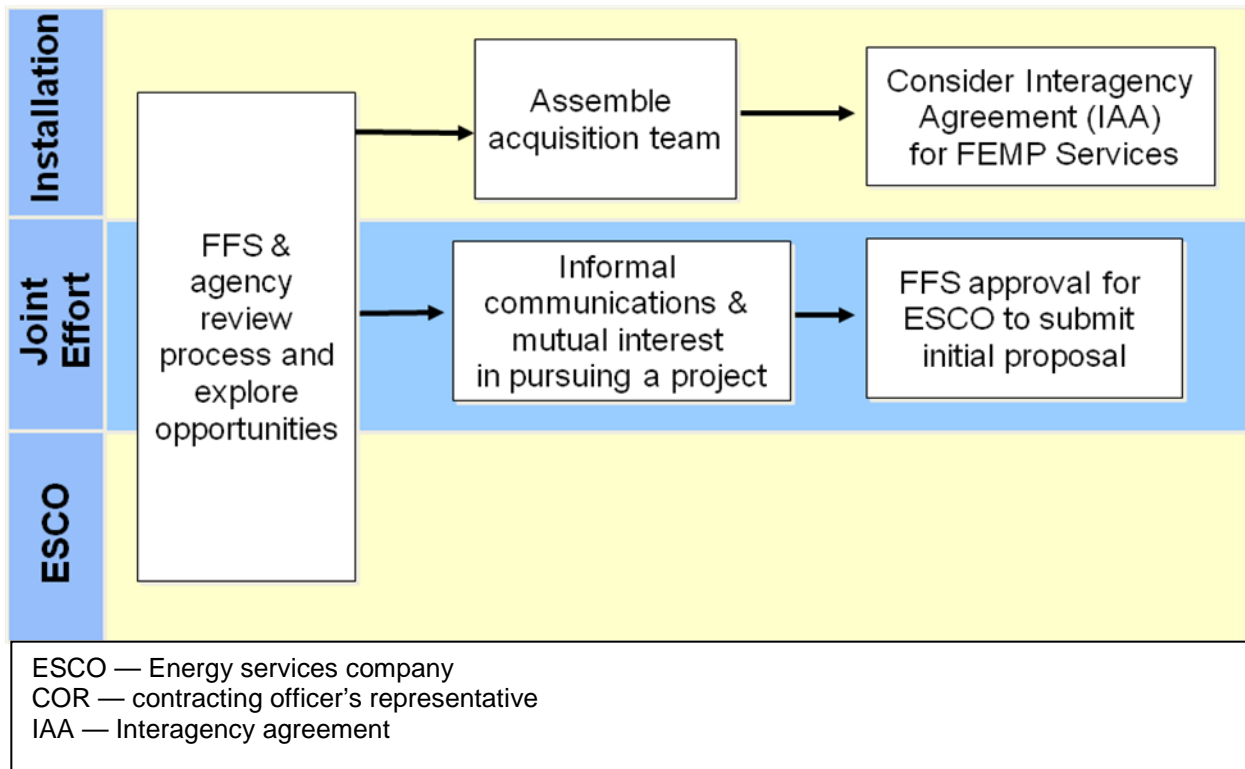
- a. DOE currently administers two types of ID/IQ contracts (regional & technology specific). Five to seven contracts are available per DOE region and cover all government agencies in all 50 states, the District of Columbia and territories; two to five contracts are available under each technology specific contract and are world-wide. A resolicitation of the ID/IQ contracts is in progress with award expected in the second half of calendar year 2008. For the latest information on using these contracts, see their website:  
<http://www1.eere.energy.gov/femp/financing/superespcs.html>.  
[http://www1.eere.energy.gov/femp/pdfs/espac\\_fact\\_sheet.pdf](http://www1.eere.energy.gov/femp/pdfs/espac_fact_sheet.pdf)
- b. Contact a FEMP Federal Energy Projects Financing Specialist for assistance. See <http://www1.eere.energy.gov/femp/about/regionalfemp.html>
- c. The Defense Energy Support Center (DESC) can provide contracting assistance for the DOE contracts, if needed. To learn more about the DESC/DOE partnership contact the Director, DESC Energy Enterprise Office 703.767.5168, or the Contracting Officer, DESC ESPC Contracting Division, 703.767.8451

### REQUIREMENTS

**Funding** - Reimbursement for Project Facilitation is required for service after the Initial Proposal/Preliminary Assessment phase and can be transferred upfront, or Installations can defer payment through various options for up to three years.

**Interagency Agreement (IAG)** - Signed between the Installation and DOE. Sample documents will be provided by the DOE FFS or can be found on the DOE ESPC website at:  
[http://www1.eere.energy.gov/femp/financing/superespcs\\_espbasicsp1.html](http://www1.eere.energy.gov/femp/financing/superespcs_espbasicsp1.html)

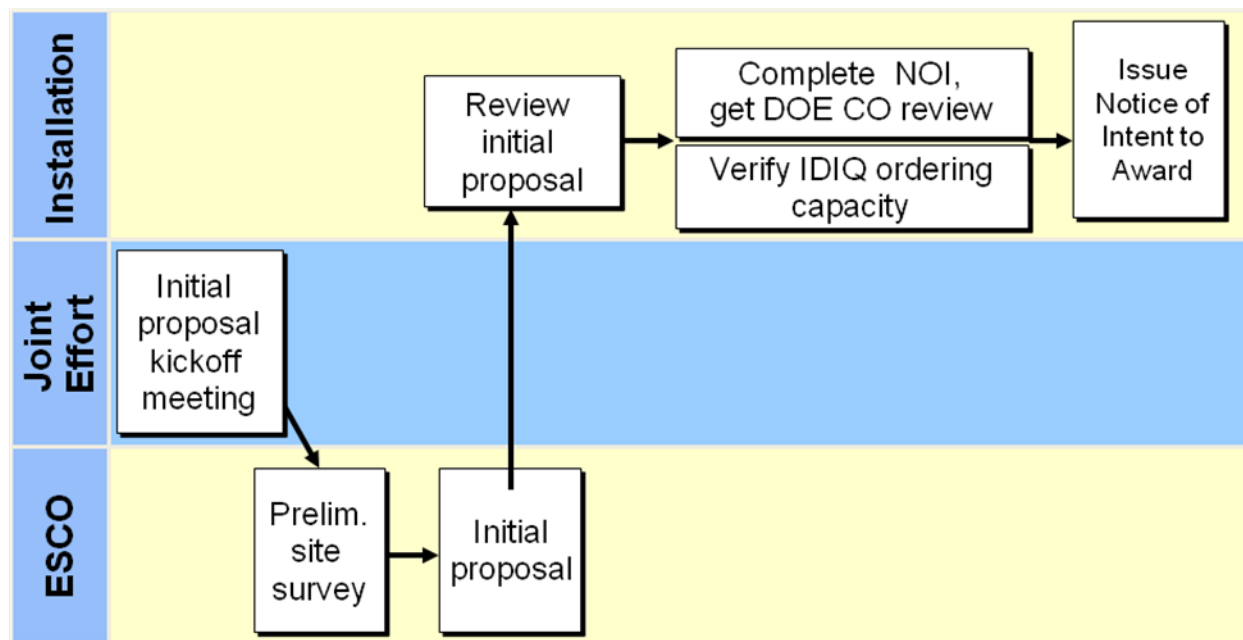
## Phase 1. Project Planning Explore Opportunities, Assemble Acquisition Team, and Plan



### Phase 1.

During this early phase of project development, Contracting Officer's Representative leads the Installation through first steps.

**Phase 2.**

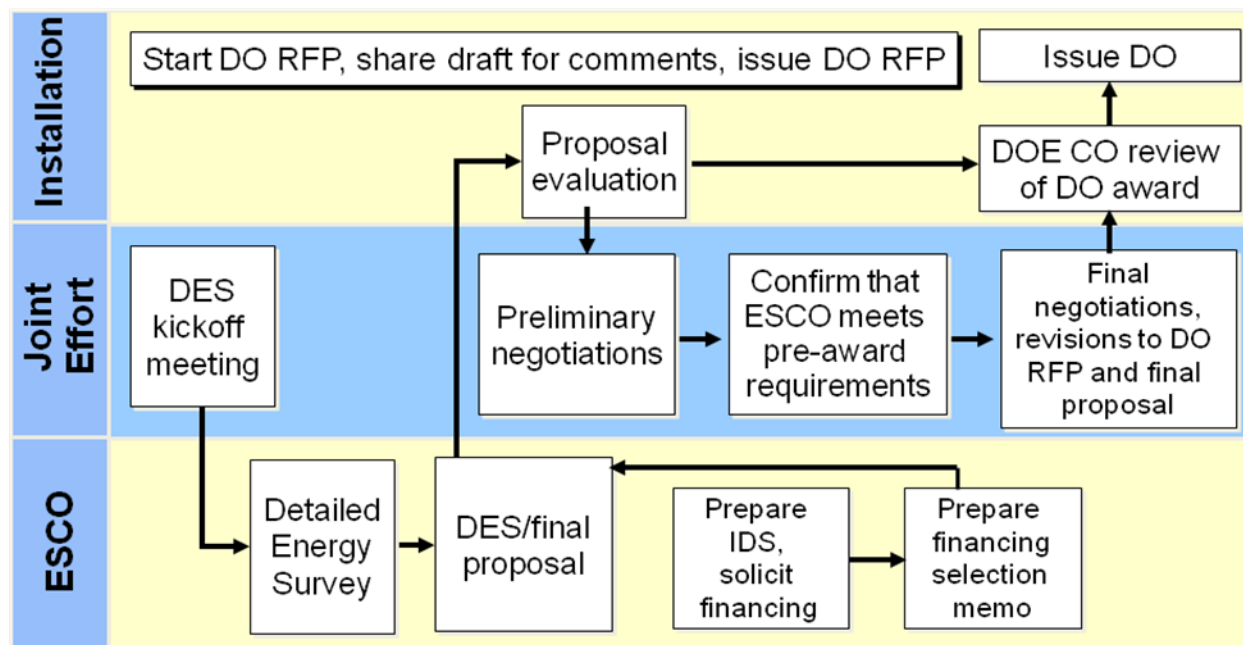


CO – Contracting officer

IDIQ – Indefinite-delivery, indefinite-quantity (contract)

In this stage of project development, the ESCO and Installation begin working as a team. The Installation uses the kickoff meeting to make sure that the ESCO has a clear understanding of the government’s priorities and general parameters for the project. After a preliminary site survey, the ESCO prepares an initial proposal, which is intended to give the Installation enough information to make a confident decision on whether to proceed with a project, based on a preliminary scope and estimated costs, savings, and price. The FEMP ESPC Team reviews the initial and final proposals, and generally provides a first-draft TO RFP to the Installation based on FEMP’s prescriptive template and the PF’s understanding of the Installation’s requirements.

### Phase 3. Negotiation and Award of Final Task Order



DES — Detailed Energy Survey  
CO — Contracting Officer

IDS — Investor’s Deal Summary

#### Phase 3.

The final proposal represents the deal that the Installation will live with through the entire contract term and naturally warrants careful scrutiny. The PF thoroughly reviews the final proposal, including Risk & Responsibility Matrix, technical description of the ECMs, M&V plan and baseline, energy and cost savings calculations, pricing, financing, and delivery order schedules.

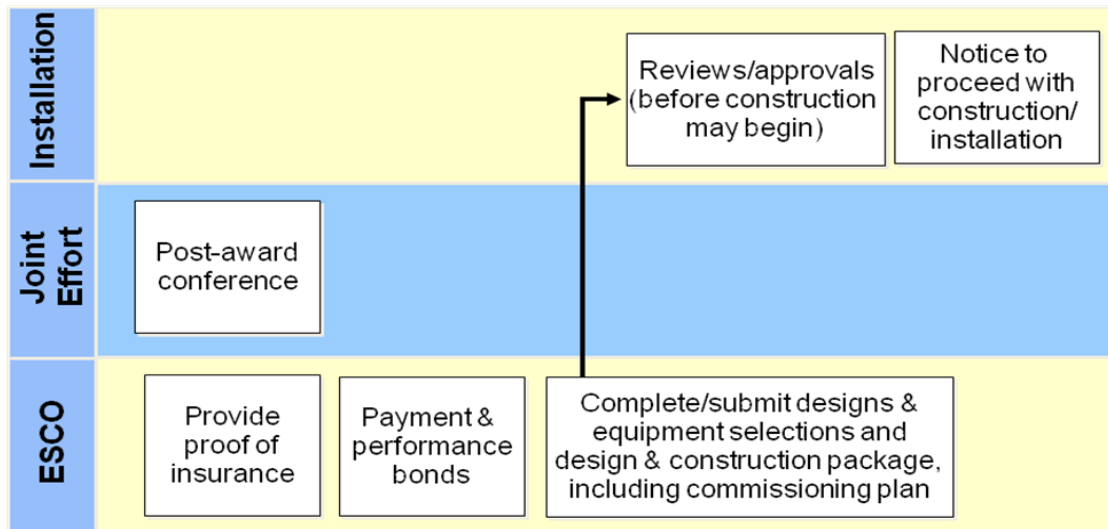


## Phase 4. Implementation — Design, Construction, and Acceptance

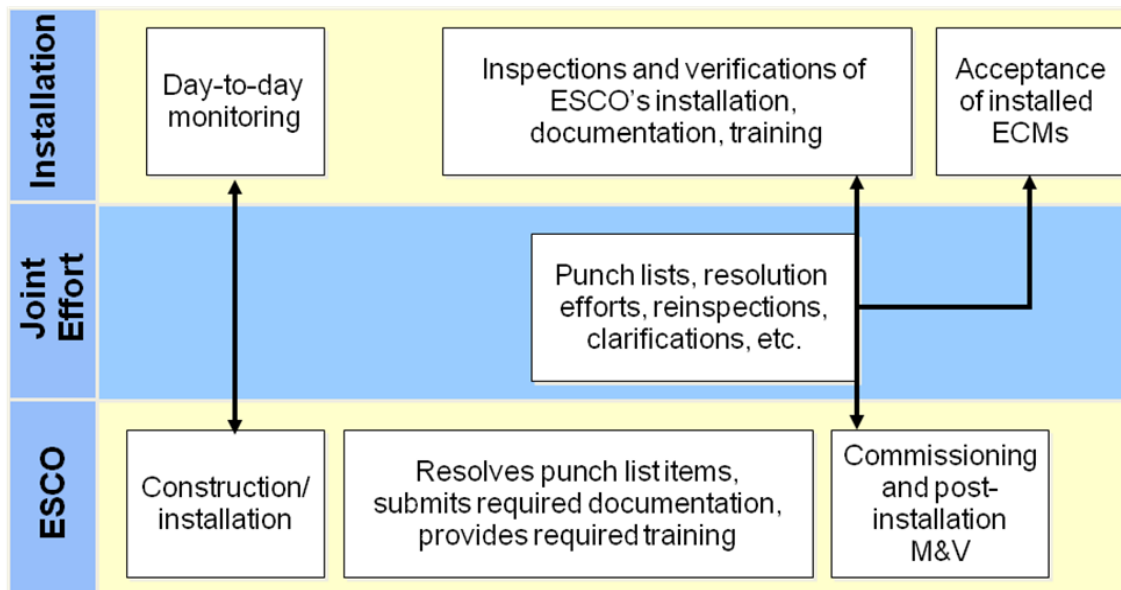
Phase 4.

Design and construction of the ECMs completed; the ESCO performs commissioning and post-installation M&V, verifying the potential of the ECMs to achieve the guaranteed savings and comply with facility performance requirements; and all ECMs are inspected and accepted by the government.

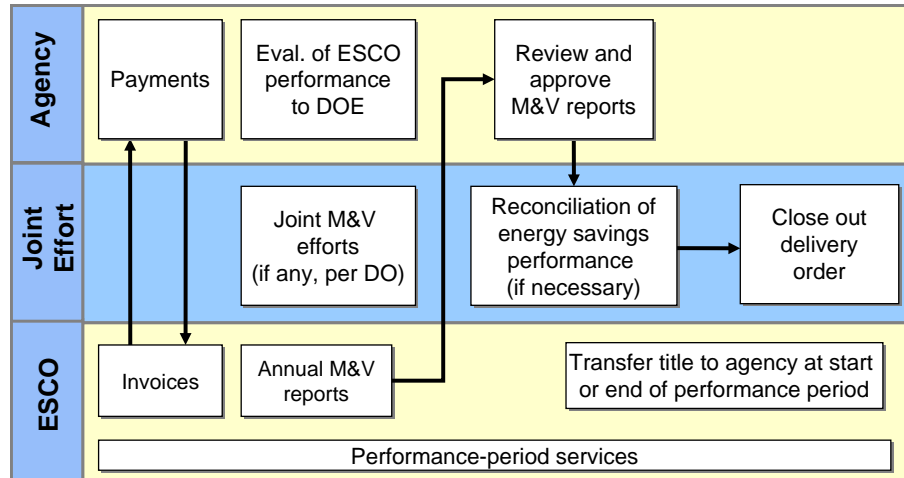
### Phase 4, Part 1. Review and Approval of ESCO's Design & Construction Package



### Phase 4, Part 2. Installation/Construction and Project Acceptance



### Phase 5. Performance Period



**Phase 5.**

During the performance period, the Installation administers the contract and ensures that the ESCO carries out its responsibilities in accordance with the contract. Annual M&V reports document the performance of the installed ECMs.

## **PROCEDURAL GUIDANCE 3C GSA FEDERAL SUPPLY SCHEDULE – ENERGY SOLUTIONS**

Procedural Guidance 3C explains how to use the Federal Supply Schedule Program to meet your ESPC needs. It informs you how the ordering process works and which products and services are currently available.

The following information is in this document:

- Multiple Awards Schedule Ordering Process
- Types of Products and Services Available
- Special Contract Terms for ESPCs
- Best Value Criteria
- Special Item Number (SIN) Descriptions
  - SIN 246-50 Ancillary Services
  - SIN 246-51 Installation Requiring Construction
  - SIN 246-52 Professional Services
  - SIN 246-53 Leasing

Use this information as a reference guide in your energy efficient journey.

If you have any questions as to how this process works, or any suggestions for ways to improve our product/service offerings, please contact the following:

Sheila Brannan  
Contracting Officer (7QSAB-E5)  
Greater Southwest Acquisition Center  
Federal Acquisition Service  
819 Taylor St. Room 7A37  
Ft. Worth, TX 76102  
817-574-2426 fax 817-574-2689  
sheila.brannan@gsa.gov

## **USING MULTIPLE AWARD SCHEDULES**

In general, using multiple awards schedules is simple:

1. Review prices from 3 schedule contractors.
2. Determine the best value. You may use any reasonable criteria to determine best value
3. Place the order.

The following ordering procedure details how this procedure would be followed when using multiple award schedule contracts for ESPCs:

## **ORDERING PROCEDURE**

1. Contractor performs feasibility analysis.\*
2. Contractor performs preliminary energy audit.\*
3. Contractor and Installation enter into agreement for the contractor to perform a detailed energy audit. The procedures and price of this audit shall be conducted in accordance with the terms of SIN 246-50, Ancillary Services or SIN 246-52\*\*.
4. Contractor shall present detailed project design, showing the proposed scope of work. In addition to the design, the contractor shall present a proposed price for the work to be performed. The price shall consist of product prices, and labor prices (to be negotiated in accordance with SIN 246-50 and/or Special Item Number 246-51, Installation Requiring Construction). The monthly payment shall be calculated by the contractor utilizing the contractual rate of interest.
5. Upon agreement of the price and scope of work, a delivery order shall be issued by the ordering Installation.
6. Upon acceptance of the work, the guarantee period shall begin.

\*Installation will determine which contractor offers the best value after these two steps. No cost to the Installation for these services.

\*\*Cost of the detailed energy audit may be paid for by the Installation or rolled into the lease agreement.

\*\*\*Procedures for SINs 246-50, Ancillary Services and 246-51, Installation Requiring Construction, 246-52 Professional Services, and 246-53 Alternative Financing are attached.

**Sin 246-53 Leasing/Alternative Financing Agreement**

<b><i>Total Financed Amount</i></b>	<b><i>Budgetary Lease Rate</i></b>	<b><i>Projected Contract Term</i></b>
Projects under \$1 M		5 Year and 10 Year
Projects from \$1 M - \$2.5 M		5 Year 10 Year 15 Year
Projects over \$2.5 M		5 Year 10 Year 15 Year

**TYPES OF PRODUCTS, INCLUDING BUT NOT LIMITED TO:**

- Facility Management Systems
- Lighting
- Chillers/HVAC
- Cooling Towers (to be added)

Under the modifications clause of the contracts, contractors can add additional products as needed in an expedited manner. It is in this manner that you can be assured that schedule contracts offer the latest in commercially available products and services. If there is something you need to have on contract, just ask us and we will do whatever we can to make the product/service a contract item.

All of the above products are located under Special Item Number 246-42, Facility Management Systems. All contractors allowed to perform ESPCs in this program either have the items on their individual contracts or will team with current schedule contractors to meet your requirement.

It is by combining the products, services, and financing, that you can obtain a total solution. If this sounds like a time-consuming process, it is not. The contractors will take care of all of this for you. All you need to do is follow the simple ordering procedure on Page PG 3C-2.

## **SPECIAL ITEM NUMBER DESCRIPTIONS**

### **SIN 246-53 - SYSTEM LEASING/ALTERNATIVE FINANCING**

Options available under this attachment are: Lease to Ownership (Capital), Lease with Option to Purchase (Operating), Rental (Short-Term Lease). Other lease options may be proposed and accepted if determined in the best interests of the Government.

**Past Performance** – In order to assist the Government in assessing an offeror's past performance, each company responding to this solicitation is required to have Open Ratings, Inc. complete a Past Performance Evaluation Report on that firm. The request to Open Ratings must be made prior to submission of a proposal. Each offeror must submit, with its proposal, a completed copy of the past performance evaluation sent by the offeror to Open Ratings. Any charges associated with the Past Performance Evaluation Report will be paid by the offeror.

### **APPLIES WHEN SIN 246-53 IS UTILIZED FOR ESPCS ONLY**

Capital leases may be performed under this sin for a period not to exceed 25 years for the sole purpose of ESPCS, subject to the following conditions:

- Installations utilizing this SIN for ESPCS are required to have obtained any required approvals under 42 USC 8287.
- Annual Energy Audits are required. The audit is required to be performed utilizing the North American Measurement and Verification Protocol. Steps in the audit process include: Baseline Verification, Post-Installation Verification, and regular Interval Post-Installation Verification. Required energy audits shall be included in the lease payment quoted by the contractor in response to the Installation's scope of work.
- Terms and Conditions of the Performance Guarantee shall be specified by the contractor in their response to the Installation's scope of work. This guarantee shall, at a minimum, provide that the contractor is responsible for maintenance and repair services for any energy related equipment installed under this agreement (including computer software systems). **The contractor shall guarantee a minimum amount of energy savings per year.** Shall the minimum savings amount not be met; the difference shall be paid to the Installation within 30 days of the end of the yearly period.

- Aggregate annual payments made by an Installation to both the utility and ESCO may not exceed the amount that the Installation would have paid for utilities without an ESPC during the life of the agreement.
- Guaranteed savings must exceed the debt service requirements.
- Customer agencies shall have the right to place additional requirements within the scope of this contract in their statement of work. Any maintenance agreement performed under this provision shall be effective for the duration of the lease, unless otherwise specified by the Installation in their scope of work. The Installation shall obtain title to the equipment following the final lease payment
- The Installation shall have the option of “buying out” the lease at any period during the lease. The buy-out amount shall be the remaining residual value.

### **SPECIAL PROVISIONS**

This lease is for the number of years stated in the delivery order. The Government has the right to terminate this contract for convenience or default in the accordance with Federal Acquisition regulation Part 49.

In the event that the lease is terminated for lack of funding, the Government may purchase the leased equipment for the residual value within 30 days of receipt of invoice from the vendor or may elect not to purchase the leased equipment. Alternatively, if the equipment is not purchased, the Government shall permit the lessor to enter the premises and remove all or any portion of the leased equipment the lessor may choose. Any equipment not removed shall become the property of the Government.

### **CANCELLATION CEILING**

Should the lease be completely terminated for convenience (for any reason other than the aforementioned lack of funding), the Government shall purchase the leased equipment for the residual value. The residual value shall be determined by utilizing the standard payments function on the commercially available spreadsheet program (e.g. Lotus 1-2-3, Excel, etc.) The contractor shall provide the Government a table detailing the yearly estimated residual value based on the interest rate quoted to the Government at the time of the Statement of Work.

In the event of a partial termination for convenience, the Government and the lessor shall negotiate a reasonable compensation to the lessor for the residual value of the leased equipment included in the terminated portion of the lease.

## **PERFORMANCE DELAYS**

The Contractor shall be liable for default unless nonperformance is caused by an occurrence beyond the reasonable control of the Contractor and without its fault or negligence beyond the reasonable control of the Contractor and without its fault or negligence such as, acts of God or the public enemy, acts of the Government in either its sovereign or contractual capacity, fires, floods, epidemics, quarantine, restrictions, strikes, unusually severe weather, and delays of common carriers. The Contractor shall notify the Contracting Officer in writing as soon as it is reasonably possible after the commencement of any excusable delay, setting forth the full particulars in connection therewith, shall remedy such occurrence. Any delays caused by the Government in its contractual capacity shall be dealt with in accordance with Federal Acquisition

<b>SPECIAL ITEM NUMBER 246-50 - ANCILLARY SERVICES</b>
--

Includes, but is not limited to: services necessary to install the system (from design through start-up), maintain the system (including maintenance agreements, which may not exceed the term of this contract), or training.

### Ancillary Service **excludes:**

- Construction (construction is defined as alteration, or repair of buildings, structures, or other real property)
- Architectural Engineering Services (A&E) under the Brooks Architect-Engineers Act as stated in Federal Acquisition Regulation (FAR) Part 36. These services shall be ordered only in accordance with Part 36 and Installation procedures, and shall not be included on a GSA contract order as an open market item.
- Personal services.
- Stand-alone services which are applicable to the Service Contract Act (SCA)

Contractors are responsible for the following when performing services under this SIN:

- Contractors may subcontract any ancillary services ordered under this Special Item Number, unless specifically prohibited by the contracting officer issuing the order against the Multiple Award Schedule contract.
- Contractors are responsible for insuring that the scope of work is completed and all warranties are honored.
- Subcontractors must be licensed and bonded, as applicable.
- Compliance with all local laws, regulations, and ordinances are the responsibility of the prime contractor.



- The prime contractor shall accept full responsibility and liability for all work performed by subcontractors, at any level or tier.
- The Government reserves the right to apply liquidated damages whenever the required delivery date is not met.
- Contractors are required to maintain insurance in accordance with Clause 52.228-5, Insurance – Work on a Government Installation.
- Agencies' Scope of Work will inform the Contractor of the Required insurance amounts. Clause 52.228-5 is made part of this contract by reference.
- The contracting officer for the Installation may insert any Installation unique requirements for the job, including employee suitability determination requirements (security checks), into the scope of work.
- Contractor quotations shall specifically detail all products and services with the contract price and provide a single price for services.
- Sales of ancillary services shall not be combined or reported with the product SIN.

The Installation is responsible for:

- Defining and issuing the statement of work for ancillary services. Accurate definition of the scope and statement of work is essential to facilitate realistic quotations. The statement of work shall also inform the contractor of any applicable insurance requirements.
- Ordering agencies shall obtain pricing information from the schedule contractors, and will negotiate for ancillary services on an order by order basis, based on complexity and level of effort. Ancillary services shall be priced as separate line items on each order.
- Pricing of services has been determined fair and reasonable by GSA. However, ordering agencies shall make a determination that the total price is fair and reasonable based on the level of effort and the mix of labor proposed.
- Ordering agencies will comply with all appropriation laws and ensure that the correct types of funds are obligated on each order.

Reference FAR 8.4 for an explanation of ordering procedures used when purchasing through a Multiple Award Schedule contract.

**All proposed services must be within the scope of this SIN on the contract. Furnish a full and detailed description of the services offered and a pricing proposal in accordance with the Services Pricing Proposal (page 03-10) of the solicitation.**

**Offerors may only offer this special item number in conjunction with systems offered under this schedule . The principal purpose of this schedule is for the purchase of alarm and signal systems/facility management systems.**

**SIN 246-51 - INSTALLATION REQUIRING CONSTRUCTION  
(If you are offering this SIN, review clauses regarding Construction in Appendix 1  
of this Attachment)**

INCLUDES: Installation which requires construction.

Note: Ancillary services involving installation which do not meet the definition of construction as defined in FAR 2.101 shall be covered under SIN 246-50.

Note: This SIN specifically EXCLUDES Architectural Engineering Services (A&E) under the Brooks Architect-Engineers Act as stated in Federal Acquisition Regulation (FAR) Part 36. These services shall be ordered only in accordance with Part 36 and Installation procedures, and shall not be included on a contract order as an open market item.

Contractors are responsible for the following when performing services under this SIN:

- Contractors must comply with Construction Clauses and Davis-Bacon Regulations. The clauses shown in Appendix 1 to Attachment 3 of this solicitation will apply to Installation orders placed against the schedule contract.
- Compliance with all local laws, regulations and ordinances are the responsibility of the GSA prime contractor. The prime contractor shall accept full responsibility and liability for all work performed by subcontractors under a resultant contract.
- Contractors shall review the statement of work issued by the Installation and provide a separate quote for services to be performed under this SIN based on the Installation's requirements. Should the contractor not be able to meet requirement(s) in the statement of work, the contractor's quote must specifically identify the items which have not been included in the quoted price.

- Contractors must provide bonding and insurance as required by the Installation's statement of work.
- Contractors may serve as a prime contractor and subcontract any services, including installation or site preparation, unless specifically prohibited by the ordering contracting officer. Subcontractors must comply with any licensing and bonding requirements specified in the statement of work.
- The contractor shall be responsible, accountable and liable for all work performed, including work performed by subcontractors (at all tiers), and for ensuring the work performed is completed in accordance with the ordering agencies statement of work.
- The contractor shall ensure all warranties are honored. All construction work must be guaranteed for any defect in workmanship and materials.
- The Government reserves the right to apply liquidated damages whenever the required delivery is not met in accordance with clause 52.211-12, Liquidated Damages – Construction.

When placing orders for services under this SIN, Ordering Agencies shall follow the procedures at FAR 8.405: The Installation is responsible for:

- Complying with all Federal Appropriation Laws and ensuring the correct types of funds are obligated on the order.
- When construction, alteration or repair of public buildings or public works is to be performed under this SIN, Ordering Agencies must comply and ensure contractor compliance with the Construction Clauses and Davis-Bacon Regulations. See Appendix 1 of the GSA solicitation for a complete listing of the FAR and GSAM Clauses incorporated by reference for all schedule contractors awarded this SIN. Ordering agencies shall utilize these clauses as a guideline and shall incorporate the applicable clauses into the statement of work for orders issued against the Federal Supply Schedule contract. The Installation is responsible for including the most current version of these clauses and any other applicable clauses into the order. Clauses which require "fill-ins" shall be completed by the Installation. Any Installation specific clauses which may apply based on Installation regulations or requirements shall be incorporated in the task order.
- Defining and issuing the statement of work for services, including installation and site preparation. It is essential that the Installation's statement of work includes an accurate description of the work requirement to facilitate realistic quotations.
- The statement of work shall clearly inform the contractor of all bonding requirements and any required insurance amounts.

- The Installation will provide the local Davis-Bacon wage rates to contractors. Applicable wage determinations will be incorporated into the statement of work and resulting task order.
- Reviewing quotations from schedule contractors to ensure the work proposed meets the statement of work requirements. The Installation should request the contractor to submit fixed price quotes to perform the services.
- The Installation shall evaluate all responses received using the evaluation criteria provided to the schedule contractors. The Installation is responsible for considering the level of effort and the mix of labor proposed to perform a specific task being ordered, and for determining that the total price is reasonable.
- Performance clauses shall be modified for each job by the Installation.
- Administration of orders issued under this Special Item Number.
- All orders and payments must be made to the schedule contractor or their designee. Example: A contractor may designate a participating dealer to receive payment.

**All proposed services must be within the contract scope. Furnish a full and detailed description of the services offered and a pricing proposal in accordance with the Services Pricing Proposal (page 03-10) of the solicitation. Upon award, the contract will specifically state those services accepted for this SIN.**

**Offerors may only offer this special item number in conjunction with systems offered under this schedule. The principal purpose of this schedule is for the purchase of alarm and signal systems/facility management systems.**

<b>SIN 246-52 - PROFESSIONAL SECURITY/FACILITY MANAGEMENT SERVICES</b>
--

Includes, but is not limited to: Security Consulting/Training and Facility Management Consulting. Professional Services offered under this SIN shall be for the support of security systems (including access control, intrusion alarms, fire alarm systems, etc.) and Facility Management Systems (including security and energy management) only. Excludes personal services.

Offerors should submit their method of commercial pricing for any proposed professional services. The Government anticipates award based on the offeror's commercial pricing policies. Other pricing methods may be evaluated.

Tasks for these and related services may be ordered. Orders shall be placed in accordance with **Ordering Procedures for Services at an Hourly Rate**. A copy of these procedures is attached to this solicitation.

Prime contractors may subcontract services ordered under this Special Item Number unless specifically prohibited by the contracting officer issuing the delivery order against this Multiple Award Schedule contract. The prime contractor shall be responsible, accountable, and liable for all work performed by any subcontractor, level, or tier.

**Past Performance** – In order to assist the Government in assessing an offeror's past performance, each company responding to this solicitation is required to have Dun and Bradstreet (D&B) complete a Past Performance Evaluation Report on that that firm. The request to D&B must be made prior to submission of a proposal. Each offeror must submit, with its proposal, a completed copy of the past performance evaluation sent by the offeror to Dun and Bradstreet. Any charges associated with the Past Performance Evaluation Report will be paid by the offeror.

<b>SIN 246-53 - SYSTEM LEASING/ALTERNATIVE FINANCING</b>
--

**Note: in the context of ESPCs, the following must be considered in conjunction with the special terms for ESPCs.**

**SYSTEM LEASING:** Agreement is for leasing only, and Government will not acquire title to any equipment leased. Equipment will be leased for the life of the leasing arrangement as specified in the delivery order. The initial term of the leasing agreement is from the date of the equipment acceptance through September 30 of the fiscal year in which the order is placed, unless the ordering office has funding which exceeds a Government fiscal year. Leases executed shall be on the basis that the known requirements exceed the initial leasing term of twelve (12) months, or the remainder of the fiscal year. Renewal of a lease will be subject to availability of funding. The Government has the option to renew each year at the original lease monthly charge in effect at the time the leasing order is placed. If the Government exercises its option to renew the leasing order, as renewed, it shall include an option to renew until the expiration of the leasing agreement.

The following terms apply to leasing:

**Base Value:** The schedule price plus any agreed upon amounts under Special Item Numbers 246-50 or 246-51 (Ancillary Services or Installation Requiring Construction). Should this Special Item Number be awarded to company that does not have product elsewhere in this schedule, base values will be negotiated prior to award of this special item number. For contractors that have product For Lease to Ownership, the base value will be the contract purchase price (less any discounts). For Lease With Option to Own, the base value will be the agreed upon purchase price, less a mutually agreed upon residual value for the products.

**Residual Value:** Prior to the placement of an order under this Special Item Number, the Government ordering office and the contractor must agree on the residual value. The residual value will be used in the calculation of the original lease payment, lease extension payments, and the purchase option price.

**Lease Rate:** The Government contemplates negotiation of the lease rate using a defined spread over a risk free rate (such as a T-Note or T-Bill). Other methods may be proposed by the offeror and will be considered if advantageous to the Government. The lease rate will be negotiated between the contractor and the Government prior to the award of this Special Item Number.

Lease payments shall be determined utilizing the aforementioned variables via a programmed business calculator or by using the “rate” functions provided in commercial computer spreadsheets (e.g. Excel, Quattro, or Lotus 1-2-3).

Equipment leased under this agreement may be terminated at any time during the fiscal year. Equipment shall always remain the property of the Contractor. The Government shall have no right or interest in the equipment, except as provided in the leasing agreement, and shall hold the equipment subject and subordinate to the rights of the Contractor.

Suggested leasing options are: Lease to Ownership and Lease With Option to Own. Other lease options may be proposed and accepted if determined in the best interests of the Government.

**The Government reserves the right to consider any additional leasing methodology utilized by the commercial marketplace. Such methodology may be accepted if it is determined to be in the best interest of the Government.**

# PROCEDURAL GUIDANCE 4

## SAVINGS CALCULATIONS TEMPLATES

### Cash Flow -1

Delivery Order No:	Contractor Name:				Project Site:	
Performance Period Year	Estimated Annual Cost Savings \$	Proposed Guaranteed Annual Cost Savings \$	Total Fixed Annual Contractor Payments \$	Annual Payment for Repair & Replacement Materials	Total Annual Contractor Payments \$	Total Annual Government Savings \$
	ZERO					
ONE						
TWO						
THREE						
FOUR						
FIVE						
SIX						
SEVEN						
EIGHT						
NINE						
TEN						
ELEVEN						
TWELVE						
THIRTEEN						
FOURTEEN						
FIFTEEN						
SIXTEEN						
SEVENTEEN						
EIGHTEEN						
NINETEEN						
TWENTY						
TWENTY ONE						
TWENTY TWO						
TWENTY THREE						
TWENTY FOUR						
TWENTY FIVE						
<b>TOTALS</b>						





Procedural Guidance 4

Cash Flow 3

Performance Period

Initial Proposal

Project Site:  
 Delivery Order No.:  
 Contractor Name:  
 Contract No.:  
 Date:

AMOUNT FINANCED

Implementation Price	_____	Applicable Financial Index	_____	Term	_____
Financing Procurement Price & Taxes (\$/S)	_____	Term (Years)	_____	Issue Date	_____
Total Project Costs	_____	Index Rate	_____	Source	_____
Less Pre-Performance Period Payment	_____	Added Premium	_____		
Total Amount Financed	_____	Project Interest Rate	_____	Effective Through	_____

Year	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	Totals
<b>ANNUAL CASH FLOW (PERFORMANCE PERIOD)</b>																											
Debt Service:																											
Pre-Performance Period Payment																											
Principal (\$)																											
Interest (\$)																											
<b>a) Total Debt Service (\$)</b>																											
<b>Performance Period Expenses:</b>																											
Management/Administration																											
Operation																											
Maintenance																											
Measurement and Verification																											
Permits and Licenses																											
Insurance																											
Sales & Gross Receipts Tax																											
Property Taxes																											
Other:																											
<b>Subtotal Performance Period Expenses</b>																											
Payment into Repair & Replacement Fund w/ excess Savings																											
<b>b) Performance Period Prices</b>																											
<b>Total Contractor Annual Payments</b>																											



<b>Cash Flow -5</b>		
<b>Annual Cancellation Ceiling Schedule</b>		
<b>Project Site:</b>	<b>Delivery Order:</b>	<b>Contractor Name:</b>
		<b>Contract No.:</b>
<b>Performance Period (Year)</b>	<b>Outstanding Capital Investment</b>	<b>Total Cancellation Ceiling</b>
PRIOR TO P4 FUNDING		
END OF YEAR ZERO		
END OF YEAR ONE		
END OF YEAR TWO		
END OF YEAR THREE		
END OF YEAR FOUR		
END OF YEAR FIVE		
END OF YEAR SIX		
END OF YEAR SEVEN		
END OF YEAR EIGHT		
END OF YEAR NINE		
END OF YEAR TEN		
END OF YEAR ELEVEN		
END OF YEAR TWELVE		
END OF YEAR THIRTEEN		
END OF YEAR FOURTEEN		
END OF YEAR FIFTEEN		
END OF YEAR SIXTEEN		
END OF YEAR SEVENTEEN		
END OF YEAR EIGHTEEN		
END OF YEAR NINETEEN		
END OF YEAR TWENTY		
END OF YEAR TWENTY-ONE		
END OF YEAR TWENTY-TWO		
END OF YEAR TWENTY-THREE		
END OF YEAR TWENTY-FOUR		
END OF YEAR TWENTY- FIVE		

**Cash Flow 6, Termination Schedule**

Inputs

Interest Rate _____	Inflation Rate _____
Term _____	First yr Cancel Costs _____
Amt Financed _____	

End of Year	Payment Amount	Principal	Interest	Balance	Prepayment Premium	Total Termination Amount	Remaining Payments	Maximum Cancellation Costs	Potential Accrued Interest	Cancellation Ceiling
After Acceptance of Installation										
0										
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										







Page intentionally blank



## PROCEDURAL GUIDANCE 5

### Competitive Pricing Procedures

The greatest percentage of ESPC project cost is directly attributable to subcontractor charges. Subcontractor costs also have the highest degree of variability (other project costs such as markups and hourly rates for direct support are agreed to in advance). Therefore, **the greatest variability with regard to “best value” and “price reasonableness” lies within the process used to manage subcontractors.**

Under the current FAR, each Installation must autonomously assess what is the “best value.” A variety of methodologies are used; some determined by the government, some provided by the contractors themselves. Historically, the process has been much faster when the contractor provides the determination through a previously agreed upon process.

The best way to ensure best value is to have an open comparison and evaluation of the value by bidding for separate and distinct functions. Each function must be designed and bid based on costs of \$50K or more. For all services or equipment purchased over \$50K, the prime contractor will develop a process similar to those shown below to provide oversight of the subcontractor selection process.

One particularly efficient process begins with an open comparison and evaluation of the project value using a bidding process for distinct project functional units. This will be achieved by bidding each potential energy management savings project to multiple contractors. If this is not feasible, a waiver must be justified and approved at the project approval authority level. Each competing subcontractor then receives a bid package consisting of all the necessary information for each project functional unit for which they have interest, site information, general project description, invitation for site walk-through, and detailed requirements and procedures for bid submission.

Received bids are evaluated based on criteria including experience, thoroughness of the bid, implementation schedule/plan, and price. Pricing must be adequately detailed to allow thorough analysis. At a minimum, pricing elements must include:

- a. Description of the service to be provided
- b. Material cost for each item
- c. Labor cost for each item
- d. Equipment cost for each item
- e. Additional subcontractor work included
- f. Special services that may be required

Page intentionally blank

## PROCEDURAL GUIDANCE 6

### STANDARD FORMAT SURVEILLANCE PLANS

#### PURPOSE AND SCOPE OF SURVEILLANCE PLANS

This procedural guidance establishes the surveillance goals needed to ensure a quality ESPC project. The Quality Management of an ESPC project is an acquired skill, learned through experience and it frequently escapes attention because of lack of time, money, scheduling, and manpower constraints. The goal of this policy procedure can only be achieved through a sustained, conscientious effort by the entire project team throughout the ESPC project process. Ultimately, the success of a given project is directly related to the management and control exercised by the key personnel assigned to the project. This procedural guidance is prepared with the goal of a quality ESPC project in mind.

#### MILESTONE EVENTS

Quality Management is a series of tasks needed to administer an ESPC project – from design, contract award, construction/installation inspection, performance validation, and close-out of the project. A Milestone Events list addresses each task and is used to remind all parties of where the project stands. The ESPC Project Manager, Facilitator, or a Quality Assurance Representative is responsible for establishing and maintaining the Milestone Events list at all time during the life of the contract.

#### SURVEILLANCE PLANS

ESPC surveillance can be broken down into three phases: (1) Pre-award design phase, (2) the construction/installation phase, and (3) the performance phase.

- A. Pre-award/design Surveillance Plan: The DA Policy Guidance and supporting procedural guidance provide a detail list of tasks the ESCO and Installation must do when implementing an ESPC Task Order (TO). The PG 3 Checklist includes the major activities required to implement a TO and is a good starting point for development of the Milestone Event list for the pre-award/design surveillance plan. The final negotiations of the ESPC project must include discussions of the Construction/installation Quality Management and include a Contractor Quality Control and government Quality Assurance plan that complies with USACE Engineer Regulation (ER) 1180-1-6 in the submittal package.
- B. Construction/installation Surveillance Plan: The surveillance plan for the Construction/installation phase of the ESPC project will be managed in accordance with USACE Engineer Regulation (ER) 1180-1-6, Construction Quality Management:

<http://www.usace.army.mil/publications/eng-regs/er1180-1-6/toc.htm> . The development of the Contractor Quality Control (CQC) and Quality Assurance (QA) begins during the design phase of the ESPC project and should be well defined prior to the award of the TO. The QC personnel for the contractor must be certified by USACE prior to starting the project. The regulation provides the general policy and guidance for establishing quality management procedures in the execution of construction contracts. It also defines the related responsibilities and roles of both the ESCO contractor and the government in the management of quality during the construction/installation phase of the ESPC project. The ER requires the development of a CQC Plan and a QA Plan. The CQC is the contractor's system to manage, control and document his supplier's, and his subcontractor's activities to comply with contracts requirements. The QA is the system by which the government fulfills its responsibility to be certain the CQC is functioning and the specified end product is realized.

- C. Performance Surveillance Plan: The M&V plan developed during the design phase of the ESPC project development identifies the ESCO's performance requirements during the term of the contract and the validation of the ESCO's Annual Summary Report will serve as the Performance Surveillance Plan.

## PROCEDURAL GUIDANCE 7

### CASH FLOW GUIDE

#### Life Cycle Costing

All projects must be life cycle cost-effective in accordance with 10 CFR 436A. Additional guidance for determining life-cycle cost-effectiveness can be determined using both the Life Cycle Costing Manual (<http://www.bfrl.nist.gov/oaepublications/handbooks/135.pdf>) for the Federal Energy Management Program, and the Energy Price Indices and Discount Factors for Life Cycle Analysis (<http://www.eere.energy.gov/femp/techassist/pdf/ashb03.pdf>). These documents should be used to develop cost analyses for all submittals. **In addition, all projects over \$7M must include an independent third party LCCA prior to project approval.**

#### Positive Cash Flow

One policy requirement is that project cash flow must be positive. To make this determination, several factors must be reviewed including first costs, O&M costs, “should” costs, other recurring costs, and adjustments to the baseline. These must all be clearly defined to avoid errors and misunderstandings among all reviewing parties.

Whether the costs are first costs, planned upgrades, recurring O&M, recurring other costs, or other should costs they are treated the same way for use in an ESPC. These costs can be used for buy-down of the contract and paid upfront based on the same terms. Funding for payments or buy-down, whether up front or throughout the contract is allowed if each of the following criteria is met:

- The costs are programmed into a documented plan or formal listing. This must be approved by the Garrison Commander for the current system and must be used to ensure continued operation.
- It can be proven through historical records that the funds were spent for the current system(s).
- The costs have been substantiated by an independent third party at an elevated level beyond historical document supportability as being required to sustain the current system at current levels of effectiveness.

The baseline is determined by correct and historically recognized values. The value for utility costs and O&M costs are determined in the same way as the buyout costs (via the three criteria listed above).

## **Bundling**

The project should maximize the effectiveness by grouping ECMs to the maximum feasible extent. ECMs will be grouped to meet the following criteria:

- a. The savings will be used to buy as many ECMs as the LCCA allows if all criteria are followed.
- b. The longest Life ECM drives the maximum length of the contract. The compounded contract cannot exceed the industry-recognized life cycle of the longest life ECM in the bundle. At period end, the future value for all the ECMs must be greater than zero.
- c. All equipment that goes beyond the expected life must be replaced during the contract so that the future value at the end of the contract is greater than zero.
- d. The Installation should maximize bundling opportunities and use the savings to pay the project off as quickly as possible.

# PROCEDURAL GUIDANCE 8

## FINANCING CONTRACT TEMPLATE

### Standard Finance Offer (SFO) Template

**Project:**

**Date:**

**ESCO:**

**Narrative description of finance package:**

*Financier Note: This section is intended to communicate full understanding of the finance offer, addressing issues such as:*

Page intentionally blank

- *Third party or internal financing of capitalized construction-period interest costs*
- *Establishment of escrow or trust accounts for construction draws, performance-period administration, or other purposes*
- *Timing of project financing closing and date certain for initiation of repayments (if applicable)*
- *Timing of Government payments (monthly, quarterly, annually in advance, monthly in arrears, etc.)*

**Implementation Price (IP) (value from Investor Deal Summary (IDS)):**

**Itemized Financing Procurement Price (FPP):**

*Financier Note: Itemize all up-front charges that flow to Financing Procurement Price (FPP) in Schedule TO-3 of the Contractor's final proposal, such as:*

- *All fees, professional services, etc. (itemize individually)*
- *Capitalized construction-period interest (state all interest rate and other assumptions not specified in IDS)*
- *Hedge costs (only applicable if IDS indicates Government desires the index portion of total project interest rate to be held firm along with premium over index and FPP)*
- *Plug figure for Contractor's portion of FPP (price to arrange financing, pass-through of payment and performance bond cost, etc.; value from IDS)*

**Pre-performance-period payments (P4s, value from IDS):**

**Total Amount Financed (IP + FPP – P4):**

**Financial Summary:**

**Date to which all aspects of the offer are held firm (from IDS):**

**Premium over index interest rate (annual):**

*Financier Note: If Government desires the index to be held firm, then specify project interest rate (annual).*

**Financier portion of FPP:**

*Financier Note: Total FPP, less plug figure for Contractor's portion*

**Performance period (i.e., financing repayment) term (months):**

*Financier Note:*

- 1. Schedule of Government debt service payments, electronically in Excel format, including all supporting calculations shall be provided with SFO.*
- 2. Backup for the value of capitalized construction period interest, electronically in Excel format, including all supporting calculations, shall be provided with SFO.*
- 3. All financing offers shall be based upon the applicable financial index specified in the IDS. The maturity of the index rate shall be equal to the performance period term (i.e. 17-year performance period = 17-year index). If the performance period is not exactly equal to the maturity of a specific index, then it is recommended that a smoothed cubic spline fit be used to approximate the rate curve. This method allows the interpolation of interest rates for given maturities even when no paper was sold at those maturities. For a discussion of econometric techniques for fitting the term structure of interest rates, including bibliographic information, see, for example, Mark Fisher, Douglas Nychka, and David Zervos, "Fitting the Term Structure of Interest Rates with Smoothing Splines," Finance and Economics Discussion Series 95-1 (Board of Governors of the Federal Reserve System, January 1995).*



## PROCEDURAL GUIDANCE 9

### CONTRACTING PROCEDURE FOR UNSOLICITED PROPOSALS FROM PREQUALIFIED ESPC CONTRACTORS

#### Summary Information

- a. The *EPACT* 1992 also permits consideration of unsolicited proposals for ESPC services from a firm that is qualified to provide such services under the pre-qualification process.
- b. Proposals do not have to meet the "unique and innovative" requirement of FAR Subpart 15.6.
- c. Installation may reject any unsolicited proposal that is too narrow because it does not address the potential for significant energy conservation measures from other than those measures in the proposal (per 10 CFR 436.33).

#### Requirements

- a. Procurement team must be trained in unique aspects of ESPC contracting.
- b. Installation Contracting Officers should contact other contract agencies if assistance is required. DESC and CEHNC assistance is available to all DA components.
- c. No award based on such an unsolicited proposal may be made in instances in which the Installation is already planning the acquisition of an energy conservation measure through an ESPC contract (per 10 CFR 436.33).

#### Process

Determine if proposal is a true unsolicited proposal or simply an ESCO-identified project. A true unsolicited proposal will be formally submitted to the Contracting Officer under the provisions of 42 USC 8287. If the project is from an ESCO with an existing ESPC ID/IQ contract, consider asking the ESCO to withdraw the unsolicited proposal and resubmit the proposal through the ID/IQ contracting agency serving the Installation. If the proposal is a true unsolicited proposal:

- a. Request a detailed energy survey, if appropriate, and determine that technical and price proposals are adequate.
- b. Publish a notice on FedBizOps acknowledging receipt of the proposal and inviting other firms on the pre-qualified list to submit competing proposals (per 10 CFR 436.33).

- c. If no other competing proposals are received, the Installation may negotiate with the ESCO and award a contract for the project.
- d. If other proposals are received, all proposals must be treated as a site-specific solicitation. Request competing proposals from those ESCO that indicated their interest. Each ESCO must be given access to same information that the original ESCO had access to.
- e. Convene an evaluation board to evaluate both technical and price proposals. Establish a competitive range and enter discussions with highest ranked ESCO, or go directly to award.

## PROCEDURAL GUIDANCE 10

### CONTRACTING PROCEDURES FOR DIRECT NEGOTIATION WITH ESPC CONTRACTORS COMPETITIVELY SELECTED BY UTILITY COMPANIES

#### Summary Information

10 USC 2865 authorizes DOD to conduct direct negotiations with ESPC contractors that have been competitively selected and approved by the utility company serving the Installation.

#### Requirements

- a. Procurement team must be trained in unique aspects of ESPC contracting.
- b. Installation Contracting Officers should contact other contract agencies if assistance is required. Assistance is available from DOE, DESC, Huntsville and USACE Districts.

#### Process

- a. Firms which have been competitively selected by regulated public utilities to provide ESPC services shall be considered pre-qualified and competition may be limited. To ensure that the utility companies' qualification standards meet those of DOD, the utility customer should request that the utility company provide a statement describing the competitive process used in contractor selection.
- b. When such a specific ESPC opportunity is identified, a notice shall be placed on FedBizOps indicating that competition will be limited to those contractors competitively selected by the utility as authorized by law.
- c. From the list of available contractors competitively selected by the utility in question, a technical board may select up to five such firms judged to be capable of performing the requirements of the specific project. A written rationale for the selection of the firms shall be provided in the form of a justification package to support a Determination and Findings approved by a Contracting Officer.
- d. Upon approval of the Determination and Findings, a site specific solicitation shall be issued to the selected firms requesting abbreviated price and technical proposals.
- e. Once proposals are received, a technical board will evaluate the firms' proposals and, (if there is more than one respondent) prepare a report to the Contracting Officer including a rationale for ranking the responding firms and recommending the single firm with which the Government should conduct negotiations.

- f. Upon approval by the Contracting Officer, negotiations may then precede in accordance with established acquisition procedures. Should negotiations not result in an agreement satisfactory to the government and the selected firm, and there is more than one respondent, the government may approach the firm next ranked and attempt to negotiate a contract. Should it be determined desirable, the government may make multiple awards for separate portions of a requirement to any of the selected firms.
- g. If only one utility-selected firm exists and the Government determines a satisfactory contract cannot be concluded, the Contracting Agency should consider competing the requirement using the Government's pre-qualification procedures.
- h. If the utility offers a demand side management program that includes rebates and/or co-funding of conservation measures, an additional agreement with the utility may be needed, depending on negotiations with the parties involved.

## PROCEDURAL GUIDANCE 11

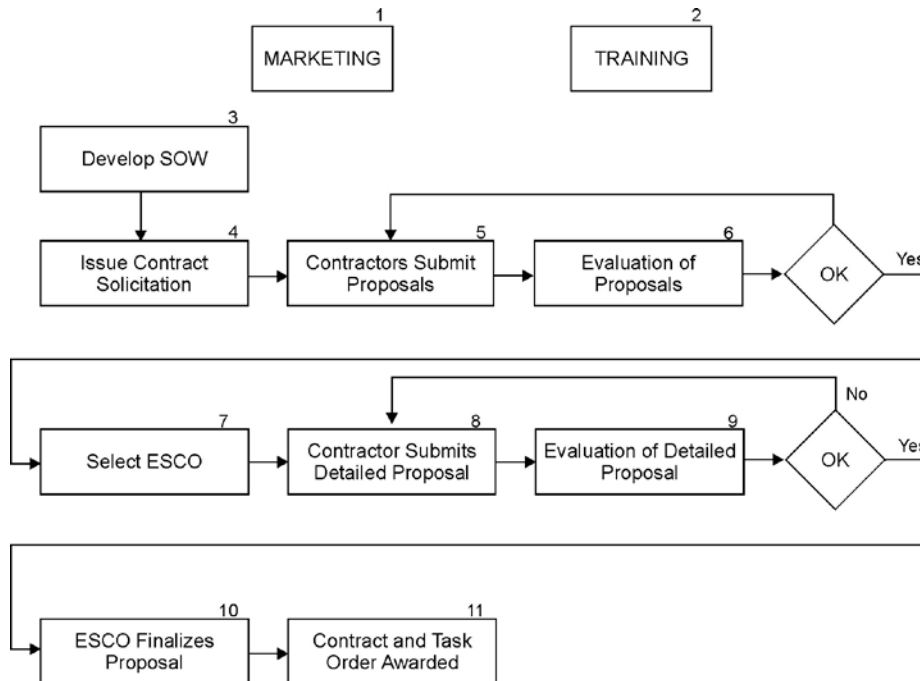
### COMPETITIVE NEW CONTRACT PROCESS

#### Summary Information

- a. ESPCs can be developed and awarded by any Installation.
- b. Installations may use their own Installation contracting office, DOE, DESC, Huntsville or USACE District's contracting office for procurement support as long as the contracting agency has demonstrated performance and experience with awarding and administering ESPCs.
- c. Contact the contracting agency of your choice for further assistance.

#### Requirements

- a. Procurement team must be trained in unique aspects of ESPC contracting.
- b. Installation Contracting Officers should contact other contract agencies if assistance is required. Assistance is available from DOE, DESC, Huntsville and USACE Districts.



ESPC Contract & Task Order Process Flow Chart

The process begins with a request from an Installation for contracting assistance. The Installation chooses to allow potential ESCOs to identify ECMs to be implemented or may offer “seed projects” on which all ESCOs must propose.

1. Marketing – The Energy Services Company (ESCO) may meet with Installation personnel to discuss the ESCO’s capabilities to provide energy services support to the Installation and to educate Installation personnel in the use of ESPCs. Support agencies may also provide some marketing and assistance at this stage.
2. Training – Training on use and management of ESPCs is conducted with Installation personnel to improve their knowledge and understanding of the process, legislation, and appropriate management controls.
3. Develop SOW – Contracting Agency prepares a competitive Request for Proposal (RFP) in partnership with the Installation. Identify any desired ESPC projects and the source selection criteria. At the same time, a Source Selection Plan will be completed and a team that will conduct proposal review will be selected. The Installation may choose to conduct a pre-proposal conference to answer industry questions and get feedback on the solicitation.
4. Contractors submit proposals – An RFP is issued to solicit proposals from ESCOs on the DOE pre-qualified list. During the proposal period, each ESCO is given equal access to all facilities.

At the end of the proposal period, each ESCO submits a detailed proposal that also includes M&V proposals, ESCO past performance, subcontracting plans, and cost proposal.

5. Evaluation of proposals – Upon receipt of offers, a Source Selection Technical Evaluation Team is formed to analyze each offer. In addition to the technical proposal, the team looks at each ESCO’s M&V proposals, ESCO past performance, subcontracting plans, and cost proposal.
6. Select contractor – The Source Selection Authority makes a decision, and a Notice of Intent to Award is issued to the selected ESCO.

The selected ESCO has a specific amount of time (generally, 60 days from that date) to perform a detailed energy audit and guarantee its savings within a pre-established percentage of the original offer.

7. ESCO refines proposal – The selected ESCO conducts a detailed audit and refines its proposal. If the 60-day audit numbers fall within the established parameters, the government enters into formal negotiations with the ESCO.

Final proposal is negotiated with the Installation – It may be necessary for the proposal to be returned to the ESCO after review to address questions, comments, and concerns prior to approval.

8. Contract & Task Order Awarded - If the proposal is accepted, a task order is awarded and work can begin. If the government and ESCO cannot reach agreement, no task order is issued.

The ESCO goes into the construction phase of the project and provides the agreed upon construction. After construction is complete or a phase of the construction is complete, the ESCO provides billing to the Installation for its agreed upon portion of the measured and verified energy savings produced and the ESCO is paid accordingly.

Page intentionally blank



## PROCEDURAL GUIDANCE 12

### ARMY ENERGY MANAGEMENT REPORT

The NECPA, EPACT 2005 and EO 13423 require each DoD agency to measure and report its progress in meeting Federal Energy Management goals and requirements. The DOE's Federal Energy Management Program (FEMP) is responsible for working with federal agencies to ensure that the agencies meet the goals and report their progress in their annual report to the President on energy management. FEMP, in consultation with OMB, consolidated the separate energy management data and reports into the Annual Energy Management Report (AEMR). The AEMR is the primary vehicle in which the Army tracks and measures its performance and energy efficiency improvement. A part of the report requires information on the ESPC program. Therefore all Army activities with an active ESPC are required to provide the information for each open Task Order annually so OACSIM can complete the table below.

Beginning in FY 2007, this data was collected in the AEMRs Energy Manager's Database.

Below is a cut-and-pasted Section 2-2 from the FY2007 Energy Management Data Report:

#### 2-2. ENERGY SAVINGS PERFORMANCE CONTRACTS (ESPC) SUMMARY

	Annual savings (MMBTU)	(NUMBER/Thou. \$)
Number of ESPC Task/Delivery Orders awarded in fiscal year & annual energy (MMBTU) savings.		
Investment value of ESPC Task/Delivery Orders awarded in fiscal year.		
Amount privately financed under ESPC Task/Delivery Orders awarded in fiscal year.		
Cumulative guaranteed cost savings of ESPCs awarded in fiscal year relative to the baseline spending.		
Total contract award value of ESPCs awarded in fiscal year (sum of contractor payments for debt repayment, M&V, and other negotiated performance period services).		
Total payments made to all ESP contractors in fiscal year.		

Page intentionally blank

## **PROCEDURAL GUIDANCE 13**

### **FORM FOR COMMENTS**

Please use the form on the next page to send us comments or suggested revisions for the HQDA Policy Guidance for Implementation of ESPC.

